

Operating instructions

TV

– Art 47 SL
– Art 42 SL
– Art 37 SL
– Art 32 SL

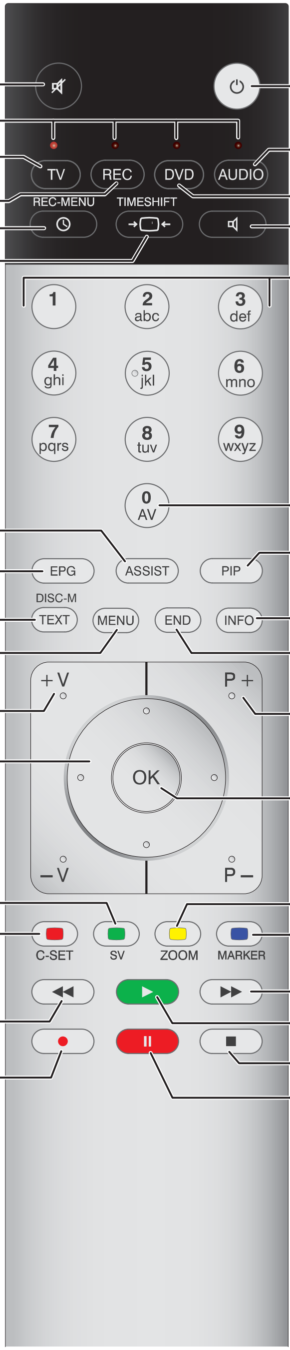
233–34177.021

LOEWE.

Contents

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Remote control – TV functions



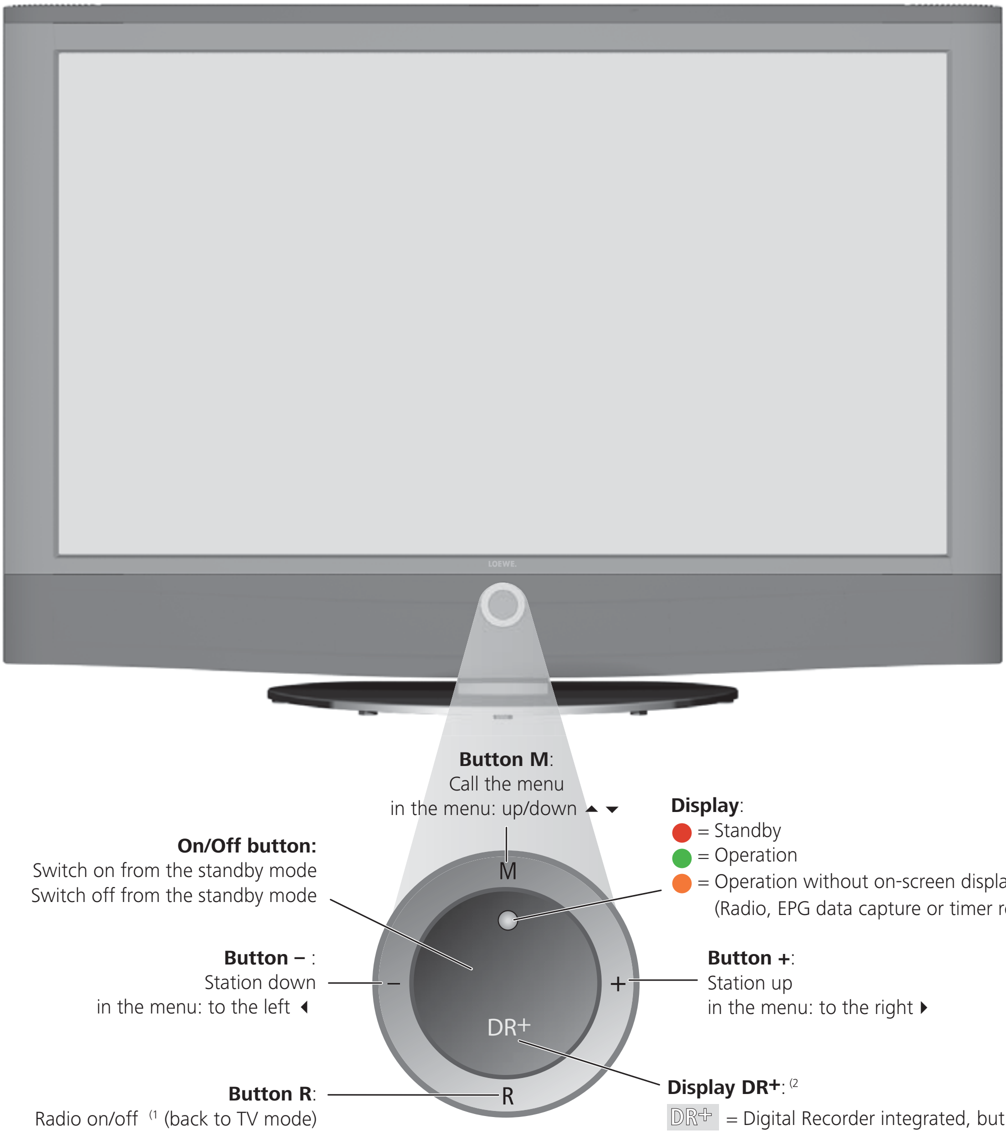
(page 22) .... Sound off/on
(page 66) .... LED display for current operating mode
(page 12, 66) .... Switch over to TV mode
(page 66) .... Switch over to operate recorder [4]
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Select station up [2]
Still frame off [2]
Still frame on [2]
Still frame on/off [2]

[1] Radio only for DVB reception, provided the station broadcasts this. Otherwise switch-over to an audio input.
[2] When equipped with Digital Recorder, these buttons have different functions, see Digital Recorder user guide.

[3] If MHEG-5 is selected for the location of TV set UK or IRL during the first installation, the button has a different function.
[4] The assignment of these keys can be changed (see page 66). The description refers to the standard setting.

Control unit front side of the device



[1] Radio only for DVB reception, provided the station broadcasts this. Otherwise switch over to an audio input.
[2] Only with integrated Digital Recorder.

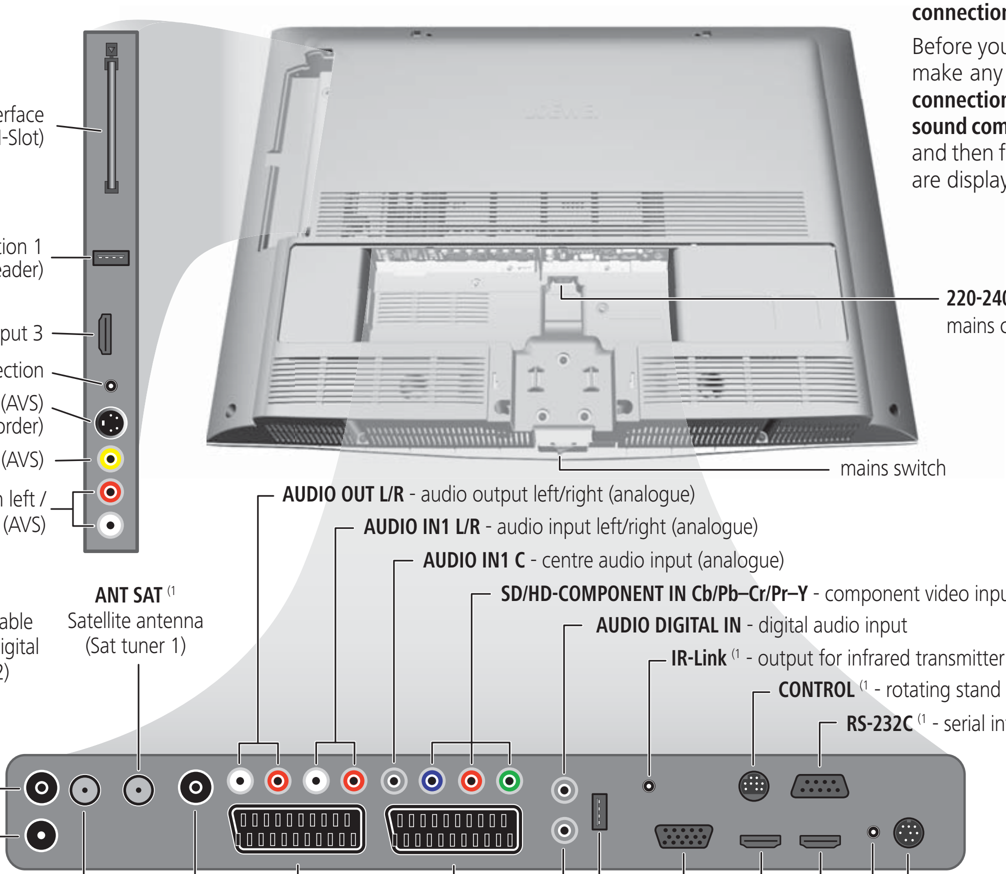
Connections rear side of the device Art 32 SL

Factory setting:

AV2: DVD recorder

You can change this during the **initial installation** (page 13) or in the **connection wizard** (page 46).

Before you connect other devices or make any changes, please start the **connection wizard** (page 46) and the **sound components wizard** (page 54), and then follow the instructions that are displayed on the TV set.



[1] See page 73 for equipment and upgrade possibilities.

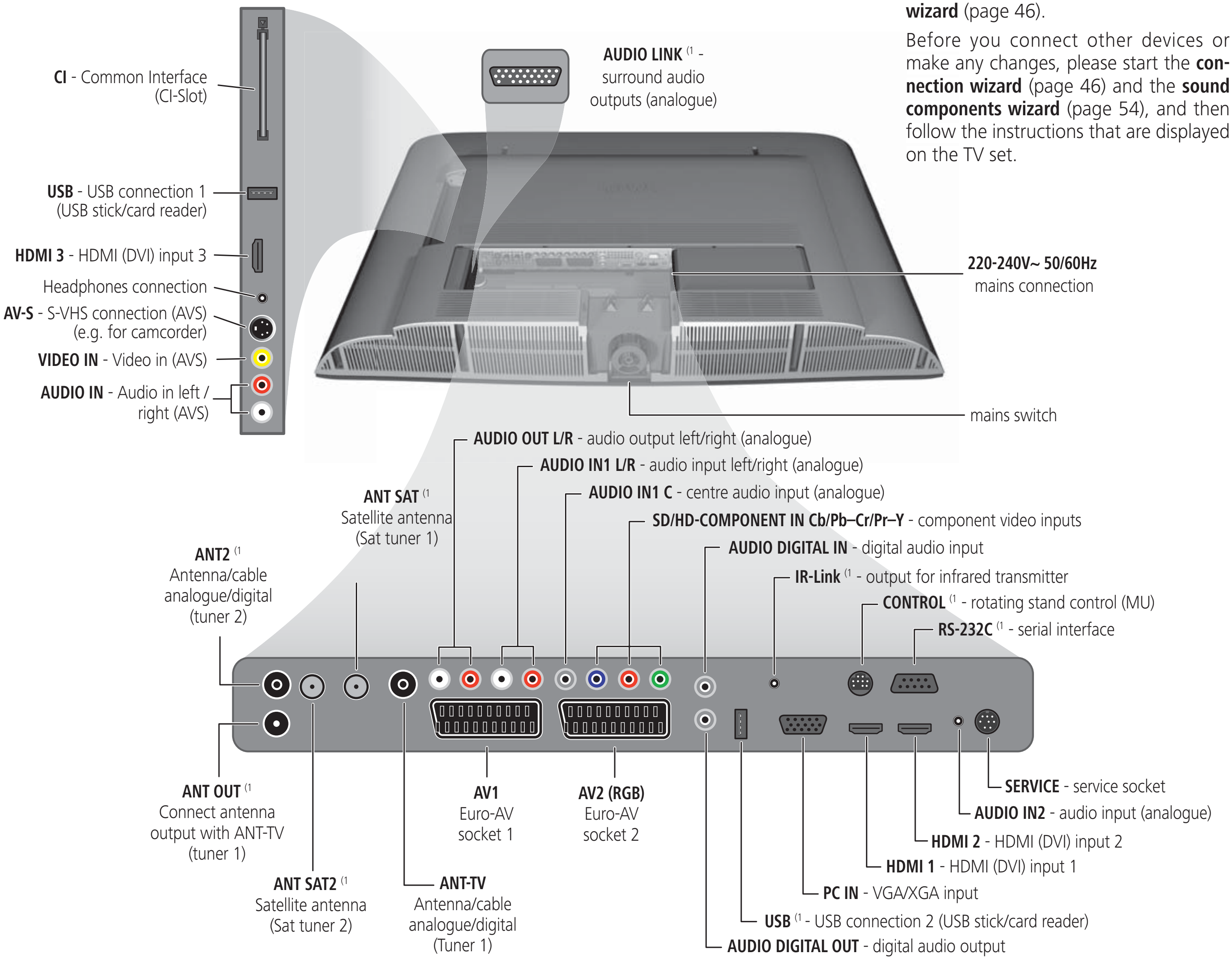
Connections rear side of the device Art 37 SL

Factory setting:

AV2: DVD recorder

You can change this during the **initial installation** (page 13) or in the **connection wizard** (page 46).

Before you connect other devices or make any changes, please start the **connection wizard** (page 46) and the **sound components wizard** (page 54), and then follow the instructions that are displayed on the TV set.



(1 See page 73 for equipment and upgrade possibilities.

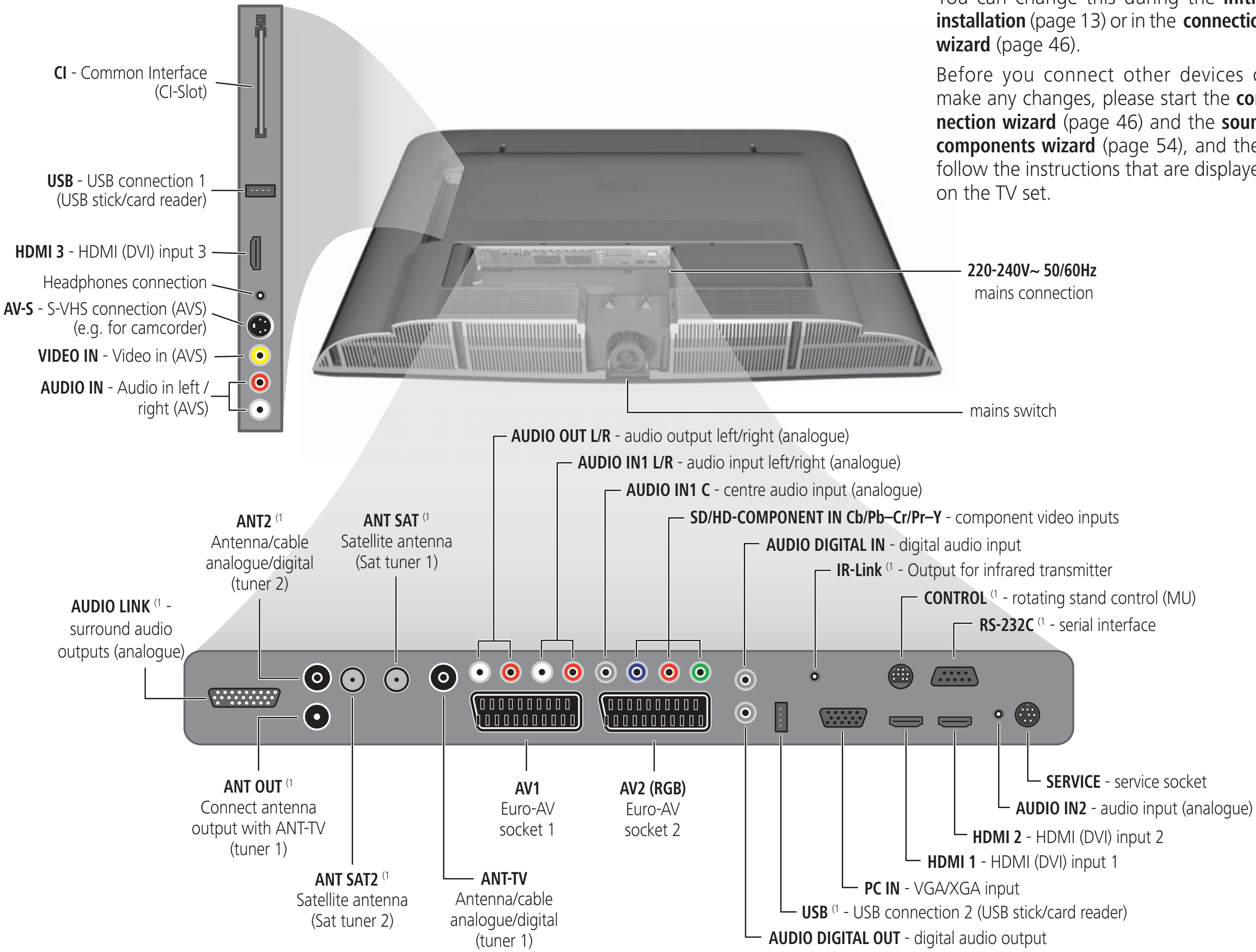
Connections rear side of the device Art 42 SL / Art 47 SL

Factory setting:

AV2: DVD recorder

You can change this during the **initial installation** (page 13) or in the **connection wizard** (page 46).

Before you connect other devices or make any changes, please start the **connection wizard** (page 46) and the **sound components wizard** (page 54), and then follow the instructions that are displayed on the TV set.



[1] See page 73 for equipment and upgrade possibilities.

Welcome

Thank you!

Loewe sets high standards in technology, design and user friendliness. This applies equally for TV, video and accessories.

Your new TV set is equipped for the TV standard "HDTV" (High Definition Television). With its high definition screen, the 100 Hz image refresh frequency and the future-oriented digital interfaces HDMI (High Definition Multimedia Interface) it offers possibilities for watching HDTV broadcasts in an excellent picture quality.
HDTV is a worldwide, digital standard in the 16:9 format which revolutionises normal TV viewing. It is broadcast with an up to five times greater resolution than conventional signals and therefore creates an unexpectedly 3D image.

The TV set is equipped for digital reception. You can use the everywhere TV (DVB-T) already broadcast many times as well as digital cable (DVB-C) and also digital satellite reception (DVB-S) with a upgrade.

If **MHEG-5** is selected for location of TV set UK or IRL, there are some restrictions for reception:
DVB-C and DVB-S reception is **not possible** with MHEG-5, see also on page 14. Common Interface Plus technology will **not work** any more after activating MHEG-5.

The TV set can be upgraded with an AC3 module. You can then connect a speaker system (e.g. Loewe Individual Sound) and enjoy the movie sound. Dolby Digital, dts and MPEG are decoded.

You can connect a card reader or a USB stick with digital photos to the USB port of your TV set and look at your photos using the integrated PhotoViewer software.
All functions can be controlled with the Loewe remote control.

We have designed the TV set in such a manner that you can easily operate it with the help of wizards and menus. Information about the menu settings is displayed automatically. You will quickly comprehend the context.

Scope of delivery

- LCD TV set
- Power cable
- Antenna cable
- Table mount (assembled)
- Remote control Assist with two batteries
- Operating instructions of Digital Recorder if there is one integrated in the TV set
- These operating instructions

About this operating manual

For many questions concerning the technology you will find an answer in the index of your TV set. If your question concerns TV set operation, you can access a function directly from the index of the Tv set. Owing to this possibility, this operating manual only explains the most important operating steps.

The index/glossary from page 75 onwards gives explanations of certain terms used in the TV set and the operating manual.

Sections beginning with the symbol ➠ indicate important instructions, hints or conditions for the following settings.

Terms which you will find in the menu or printed on the remote control or the TV set are printed in **bold** letters.

In the description, the necessary operating elements are located to the left of the text with the handling instructions.

Depending on the connected accessory equipment the menus in the TV set can differ from those described here.

All the station names, programme contents and the illustrated photos in this operating manual are examples.

TV set equipment

See the rating plate on the rear of the set for the precise product designation. The precise features are listed in the **Integrated features** item in the index of the TV set (see page 17).

Welcome

Operating convenience with wizards

This TV set offers user prompting with wizards that take you through the settings step-by-step.

You can return to the previous step or exit the wizard at any time.

The wizards in overview

Initial installation

The initial installation wizard helps you with the initial installation and connection of any existing equipment (see page 13).

Setting up the antenna

You enter in the antenna wizard which antenna signals are available to you. The antenna wizard is called in initial installation (see page 13). You can also open the antenna wizard in the **TV menu** under **Connections → Antenna DVB → Antenna DVB-S** [1] or **Antenna DVB-T**.

Search wizard

If, after the initial installation, you want to search for new stations, or if you have set up your antenna for the first time, then you can handle this task with the help of the search wizard (see page 28). You will find the search wizard in the **TV menu** under **Settings → Stations → Search wizard**.

Connecting external devices

The connection wizard ensures that all devices are correctly registered and connected. It is started automatically at the end of the initial installation wizard but can also be called separately (see page 46). You will find the connection wizard in the **TV menu** under **Connections → New devices/modifications**.

Connecting sound components

The sound component wizard ensures that the components which reproduce the TV sound are correctly registered, connected and set. It is started automatically at the end of the initial installation wizard but can also be called separately (see page 54). You will find the sound components wizard in the **TV menu** under **Connections → Sound components**.

Assist+

You can select the most important operating modes directly with the Assist+ menu (**ASSIST button**). Selectable modes are: TV, Radio digital, Teletext, PhotoViewer, CA module, Index and Digital Recorder archive when Digital Recorder is integrated (see page 17).

Programming and managing recordings

The recording wizard helps you to programme a video recording with a VCR, DVD recorder or, if installed, Digital Recorder (see page 57).

Station list

The station list is a list of all the stored stations. You can also use the station list for switching stations conveniently (see page 20).

Software update wizard

You can load the latest software for your TV set via DVB stations or with the aid of a USB stick (see page 40).

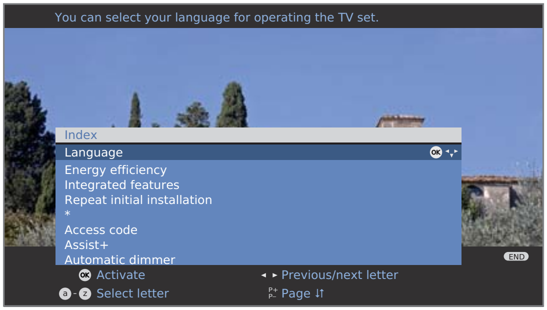
Info display and TV index

An information display for each menu item

The info display automatically shows content-based info texts in the upper part of the screen for each menu item. It forms a convenient operating system with the index (see page 16).

An index in the TV set

The index gives you an overview of the functional scope of your TV set. You can also start wizards and menu settings directly from here (see page 17).



[1] if upgraded

For your safety

For your own safety and to prevent unnecessary damage to your device, read and comply with the following safety instructions:

Proper use and environmental conditions

This TV set is intended exclusively for the reception and reproduction of video and audio signals and designed for the home and office. It may not be used in rooms with high **humidity** (e.g. bathrooms, saunas) or high **dust concentration** (e.g. workshops). The manufacturer's warranty is only valid for use in the specified permissible environment.

If the set is used outdoors then ensure that it is protected against **moisture** (rain, splashing water, or dew). High humidity and dust concentration cause creep currents in the set. This can cause electric shocks or fires.

If you have brought the set into a warm environment from the **cold**, then wait for about 1 hour before switching it on to avoid formation of **condensation**.



Do not place any **objects** filled with **liquid** or burning candles on the device. Protect the set against dripping and splashing water.

Never place the TV set in a position where it is exposed to **vibrations**. This can lead to material overload.

Transporting

Only transport the device in **vertical position**. Grasp the device on the upper and lower edges of the housing.

The LCD screen is made of glass or plastic and can break if not handled properly.
If the LCD screen is damaged and **liquid crystal** is leaking, wear rubber gloves for handling the TV set. If there is **skin contact** immediately wash thoroughly with water.

Power supply

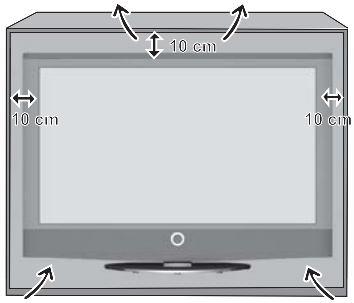
The **wrong voltage** can damage the set. This equipment must only be connected to a mains power supply which has the same voltage and frequency as that specified on the rating plate; use the power cable provided. The **mains plug** of the TV set must be easily accessible so that the device can be disconnected from the mains at any time. When you unplug the mains plug, do not pull on the **cable** rather pull on the plug housing. The cable in the mains plug could be damaged and cause a **short circuit** the next time it is plugged in.

Lay out the **power cable** in such a manner that it cannot be damaged. The power cable may not be kinked or laid over sharp edges, stepped on or exposed to **chemicals**; The latter also applies for the entire equipment. A power cable with damaged insulation can cause **electrical shock** and is a **fire hazard**.

Air circulation and high temperatures

The **vent slots** on the **rear panel** of the set must always be kept free. Please do not place newspapers or cloths on/over the TV.

At least 10 cm clearance must be left at the sides and top for air circulation if the TV set is placed or hung in a **cabinet** or a **shelf**.



Like any electronic device, your TV set requires air for cooling. Obstruction of the air circulation can cause fires.

The set is suitable for different installation solutions. See the instructions for assembly for the different installation solutions.

Stand the TV set with the table or floor stand only on a level, **sturdy, horizontal base**. Particularly ensure that the set does not protrude to the front when placed in or on pieces of furniture.

Set up the device where it is not exposed to direct **sunlight** and where it is not exposed to additional warming through **heating elements**.

Prevent **metal items**, needles, paper clips, liquids, wax, or similar items, from getting into the interior of the device through the **vent slots** in the rear panel. Such objects can cause **short circuits** in the set, which could possibly cause a fire.

If something should get into the **interior of the set** then immediately unplug the mains plug of the device and contact **customer service** for more information.

For your safety

Repairs and accessories

Never remove the back of the TV set yourself. Only have your TV device repaired or serviced by authorized television technicians.

Only use **original accessories** such as Loewe stands if possible (see Accessories on page 72).

Supervision

Do not allow **children** to use the TV set without supervision or to play in the immediate vicinity of the TV set. The set could tip over, be pushed off or pulled down from the stand surface and injure someone.

Do **not** allow the switched-on TV set to run **unattended**.

Volume

Loud music can lead to ear damage. Avoid extreme volume especially over long periods and when using headphones.

Cleaning

Clean the TV set, the screen, and the remote control unit with a soft, moist, and clean cloth,only, **without** any **aggressive** or **scouring cleaning agents**.

Thunder storms

Pull out the **mains plug** and all connected **antenna cables** from the TV set in a thunderstorm. Overvoltage caused by **lightning** can damage the set via the antenna system, as well as via the mains power. The mains plug and all connected antenna cables should also be pulled out during long periods of **absence**.

Note on the LCD screen

The TV set you have purchased with LCD screen satisfies the most rigorous quality requirements and has been inspected relative to **pixel errors**. In spite of the utmost care in manufacturing the display, for technical reasons the possibility that some **pixels** will have defects cannot be 100% excluded. Please understand that these types of effects, as long as they are within the standard of specified limits, cannot be considered as a device defect in terms of the guarantee.

Avoid displaying **still images** for long periods of time. It is possible that a copy of the image may remain.

Environmental protection

Energy consumption

Your TV set is equipped with an eco-standby power supply. In the standby mode, the power consumption drops to low power (see Technical data on page 71). If you want to save even more energy then switch the device off with the mains switch. However note that in this case, EPG (Electronic Programme Guide) data will be lost, and it may be that programmed timer recordings **cannot** be executed via the TV device.

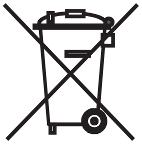
The power consumed by the TV set in operation depends on the choice of the energy efficiency presetting in the initial installation (page 14).

If you activate the automatic dimming (see page 24), your TV picture will adapt to the ambient brightness. This reduces the power consumption of the TV set.

Packaging and box

You have made a decision to purchase a high-quality technical product with a long service life. For disposal of the packaging, in accordance with national legislation we have paid a fee to a commissioned recycler to pick up the packaging from the dealer. Nevertheless we recommend keeping the original box and **packaging material** on hand so that the device can be transported with optimal protection if necessary.

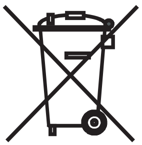
The set



The EU directive 2002/96/EC regulates the proper way to recycle, handle and utilise used electronic devices. **Old electronic devices** consequently must be disposed of separately. Please do **not** dispose of this device in normal **household trash**!

You may return your used set free of charge at designated recycling centres or at your specialist dealer whenever you purchase a new, comparable set. Further details about returning (also for non-EU countries) are available from your local authorities.

Batteries



The batteries supplied as initial equipment do not contain any pollutants such as cadmium, lead, or mercury.

Used batteries should **no longer** be disposed of in the **domestic waste** according to the Battery Ordinance. Dispose of your batteries at no charge in the **collection containers** that are set up for this purpose in retail stores.

Initial installation

Installing the TV set

First plan the installation solution for your TV set. See the installation instructions of the enclosed table mount for this.
See accessories (page 72) for other installation options.

Preparing the remote control unit

Inserting or replacing batteries

Press the embossed arrow and push down the battery compartment cover.

Insert two alkaline manganese LR 03 (AAA) batteries; ensure that the + and – poles are correctly positioned!

Slide the cover up from below.



Adjusting the remote control for operating the TV set

TV

Press the **TV button**.

See page 66 to find out how to operate other Loewe equipment.

Connecting the TV set

Connecting to the mains

Remove the cover for the connections.

Connect the TV set to a 220-240V power outlet:
First plug the small plug of the power cable into the power connection on the rear of the TV, then plug the large power plug into a mains power outlet.

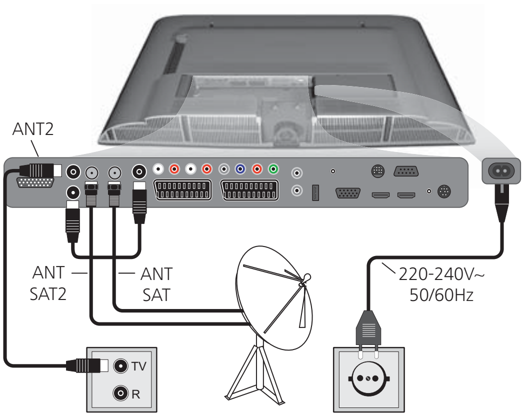
Connecting the antenna

Analogue / DVB-C / DVB-T antenna:

In sets with DR+: Plug the antenna plug of the antenna or cable system or the room antenna into the **ANT2** socket. The connecting cable between **ANT-TV** and **ANT OUT** has already been plugged in at the factory.

In sets without DR+: Plug the antenna plug of the antenna or cable system or the room antenna into the **ANT-TV** socket.

Satellite antenna, if upgraded:
Connect one antenna plug each, for example, from the antenna switch or the Twin-LNC of the satellite system to the **ANT-SAT** and **ANT-SAT2** sockets (only for sets with DR+).
If you only connect one SAT antenna cable, connect it to **ANT-SAT**.



Connections on the back of the set (see also pages 5 to 7).

Replace the cover over the connections.

Receiving coded stations

When using a CA module and a Smart-Card to receive coded stations, please observe the handling of the CA module (see page 42).

Initial installation

Turning the set on/off

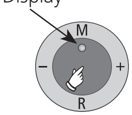
Switching the TV set to standby mode

Activate the mains switch on the bottom of the set.

The display in the control panel on the front of the set will be illuminated red, the set is now in standby mode.

Switching the TV on/off on the control unit

Press the on/off button in the middle for about 2 seconds to switch the TV set on/off.



Meaning of the display colour:

Red: Standby mode
Green: TV set is switched on
Orange: Radio mode, TV set receives EPG data or timer recording active

Switching the set on with the remote control

Press the **on/off button**

or
numeric buttons

or
TV button

or
OK button – station list is called

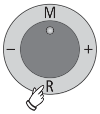
or
ASSIST button – Assist+ menu is called.

Switching the set off with the remote control

Press the **on/off button**.

➠ Before switching off the set with the mains switch, we recommend you to switch it to standby mode.

Switch on in Radio mode



Press **R** on the TV control unit.

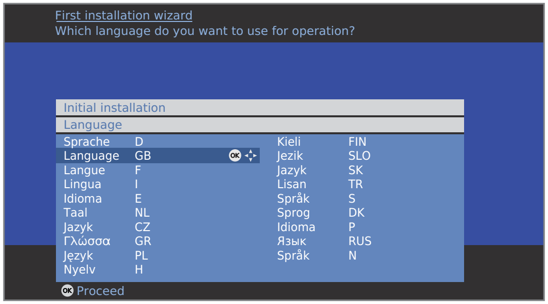
or:
Press the **AUDIO button** on the remote control (radio mode, see page 38).

First installation wizard

Initial installation after switching on for the first time

This wizard starts automatically after the set is switched on for the first time, however it can also be called later manually in the TV index, see **Repeat initial installation** on page 18.

➠ If at least one station is locked the access code must be entered before repeating initial installation (see Parental lock on page 43).



The first step with the wizard starts when selecting the language for the user prompts. From this point on follow the instructions on your TV set.

Brief explanation of button functions:

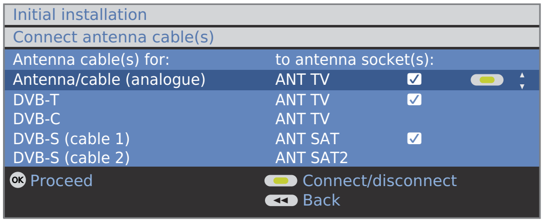
Press the ring (up, down, left, right) to move the cursor and to select settings.

By pressing the **OK button** a setting is confirmed and you will go to the next step.

With the **yellow button** you can select or remove the individual items (see the example below).
When an element is selected, it is marked by a checkmark ☑.

Use this button to go back one step.

Exit the wizard with the **END button** (if available).



An example of multiple selection using the **yellow button**.

continued on next page →

Explanations of the setting possibilities, including the upgradeable satellite reception:

Energy efficiency	Decide how energy efficiently you want to operate your TV set. The value for the contrast (and thus the brightness of the background lighting) is adapted and the automatic dimmer activated or deactivated (see page 24) depending on the presetting. **Eco standard:** The emphasis for home use is on low energy consumption. The automatic dimmer is activated. **Premium mode:** This mode optimises the settings to a brighter environment at a higher energy consumption. The automatic dimmer is activated. **Shop mode:** The picture settings are aligned to operation in the presentation room. The automatic dimmer is deactivated. If the ambient brightness diminishes, the energy consumption is not reduced. The presetting can be changed later in the **TV menu** under **Picture → Picture adjustment → Presettings** (see page 24) or under **Settings → Energy efficiency**.
Location of TV set	Select the country for country-specific pre-settings. If UK or IRL is selected for the location of TV set, it is possible to activate MHEG-5 (UK Freeview) for the TV set. A dialogue appears, where you can confirm to set the operating software to the selected location. If **Yes** is selected and confirmed with **OK**, the TV set turns off and on again automatically. First installation starts again after activating the operation software. If MHEG-5 was activated, DVB-C and DVB-S can not be used anymore. Only terrestrial/cable and DVB-T stations are available.
Antenna selection	**Antenna/cable (analogue):** analogue stations via cable/antenna **DVB-T:** digital terrestrial stations **DVB-C:** digital stations via cable **DVB-S (cable 1):** digital stations via satellite **DVB-S (cable 2):** digital stations via satellite
Subtitle and audio languages (DVB)	You can preset the desired languages and reserve languages for subtitles and audio for DVB programmes here (see page 44).
Logical Channel Number	In various countries, digital stations (DVB-T, DVB-C) are transmitted with a preset channel number per station, known as “Logical Channel Numbers” – “LCN”. In this case the preset channel numbers are adopted as station memory locations and the stations of the preferred signal source sorted according to LCN. There may be gaps in the numbering of the station list depending on the LCN.
Logical Channel Number (continued)	For TV sets with MHEG-5 software the stations are tied to “Logical Channel Numbers” – “LCN” and sorted from 1-799. Digital stations without “LCN” are stored from 800 onwards. Analogue stations are stored from 1001.
Encrypted stations	You can state whether coded stations are to be searched for in the search/update. Select **yes** to save all found scrambled stations. However, these stations can only be received in connection with a CA module and the appropriate Smart Card. Handling of the CA module is described on page 42. If a CA module with a SmartCard is already plugged in for the station search, all the stations which this module can descramble are also saved when **no** is preset.
DVB-T: Antenna	If you are using an active antenna, then select **yes (5V)** for the antenna power supply.
DVB-C: Settings	The conventional settings will be derived from the selection of set location. Only change this if you know other symbol rates and modulation types or if you have to specify the network ID for your cable network. In the case of small cable networks fed directly from the satellite, the rate of 6900 might have to be replaced by 6111. Information is available from your cable network provider. If you want to run the station search independently of the channel grid, select **frequency search** for the search method.
DVB-S: Satellite system	State how (single satellite or type of satellite system) you receive which satellite(s). Ask your dealer if in doubt.
High band	Specify here whether the high band of the selected satellite is to be searched in addition to the low band.
LNC frequencies Low Band / High Band	Normally, you do not need to change the values for high and low band, unless the LNC (LNB) of your satellite system uses a different oscillator frequency (important for the frequency display). After you have made these settings, you should receive the picture and sound of the selected satellites (only with Astra1 and HOTBIRD).
Search method	If you want to run the station search independently of the channel grid, select **frequency search** for the search method.
Symbol rates	The symbol rates are specified by the satellite provider and do not normally need to be changed.
Favoured signal source	Select the signal source from a list, the station of which is to be at the top of your station list (starting with station slot 1). Recordings with automatic time control (see page 57) are only possible for the respective first DVB signal source.

continued on next page →

Initial installation

Start search Start the automatic station search with **OK**.

The set now searches for TV and DVB radio stations.

The stations found in the automatic search are divided into the appropriate station blocks depending on the previously selected antenna cables (signal sources). Subsequently the stations can only be re-sorted within these blocks. At the beginning of the station list you will find the block with the stations of the preferred signal source.

Any mixed sorting of stations from different signal sources is only possible with the favourites list.

Age-related lock: You can specify an age limit for your TV set here. DVB broadcasts which have an appropriate age identification are locked and can only be watched after entering the access code (see page 43).

Connecting additional devices: Then the connection and sound component wizard starts which helps you to log in, set and connect video recorders, decoders, a loudspeaker system or a HiFi/AV amplifier to your TV set. A DVD recorder is already logged in ex factory.

You can start the connection wizard and the sound components wizard manually later and add new devices. Further information is available from page 46 (Connection wizard) and page 54 (Sound components wizard).

Digital Link Plus: If you have registered and connected a recorder in the connection wizard, the Digital Link Plus transmission begins at the end of the sound components wizard. If a Digital Link Plus capable recorder is connected, the station list of the analogue stations is transmitted to the external recorder.

You can also call Digital Link Plus under **TV menu → Connections → Digital Link Plus**.

Explanations of the DVB-T antenna:

Room antenna: With good reception conditions a room antenna can be used for DVB-T (socket **ANT2**).

Active antenna: Under less favourable reception conditions, it is advisable to use an active antenna which has to be set accordingly in the initial installation or in the **TV menu → Connections → Antenna DVB → Antenna DVB-T** (see DVB-T antenna on page 14).

Directional antenna: If the location is outside of the normal transmission range then a directional antenna can be used to improve reception quality.

Positioning/aligning the DVB-T antenna

If you receive one or more DVB-T stations with picture or sound interference, you should change the position and alignment of the antenna. Ask your dealer to tell you which channels are used to broadcast the DVB-T stations in your region.

➠ In normal TV mode, without other displays.
A DVB-T station is received and selected.

MENU: Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Stations**,
▼ go to the menu line below.

◀ ▶ Select **Manual adjustment**,
OK call manual adjustment.



The signal source is already on DVB-T due to the station preselection.

Position and align the antenna in such a manner that maximum values for **C/N** and **Level** are obtained.

Blue button: Start search.

Search for DVB-T stations one after another and compare values for **C/N** and **Level**.

Then position/align the antenna to the weakest station so that maximum values for **C/N** and **Level** are obtained.

Thereafter perform an automatic search for all DVB-T stations, see page 28.

Explanation of the setting possibilities:

Bandwidth: Depending on the selected channel and country the associated bandwidth will be set automatically.

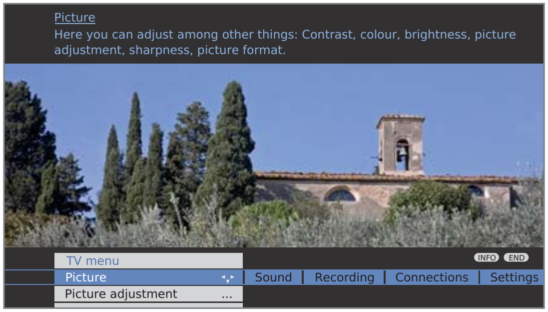
Operating convenience

General information on menu operation

Menus for the individual operating modes (TV, Radio, PIP, EPG, Teletext, PhotoViewer and DR archive, if equipped with Digital Recorder) are called with the **MENU button**. Other menus can be opened with other buttons on the remote control.
The menus are displayed at the bottom of the screen. At the top you get additional information about the selected menu item (see info display on the right).

➠ In normal TV mode, without other displays.

MENU Call **TV menu**.



Example: Selecting and executing functions



◀ ▶ Select **Picture**,
▼ go to the menu line below.

◀ ▶ Select **Brightness**,
▼ go to the menu line below.

◀ ▶ Set **Brightness**.

▲ Return to the **Brightness** menu line to make other picture settings.

◀ ▶ Select **more ...** ,
OK call **more ...** functions.

◀ ▶ Select **Auto format**,
▼ go to the menu line below.

◀ ▶ Select **on / off**.

END Conclude the settings.

Inputs with the numeric buttons



Letters have to be entered for specific functions. Like using a mobile phone keypad (1 to 9), press a numeric button until the desired character appears.

The available letters are printed on the individual numeric buttons.

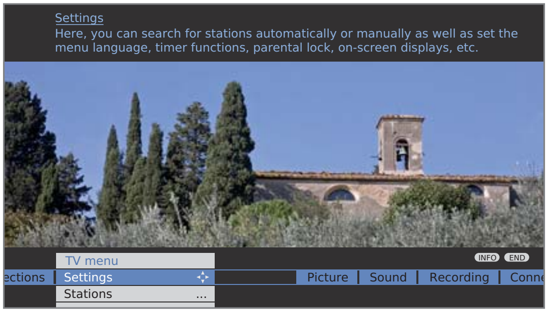
The info display

The info display shows a content-based info text for each menu item at the top edge of the screen to aid you in making the settings. In conjunction with the index it makes a convenient control system.

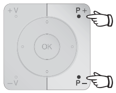
➠ A menu is displayed.

INFO The factory setting is that the info display is shown automatically for each menu item. In this case you can temporarily hide the info texts with the **INFO button**.

The automatic info display can be hidden via a menu setting. Then it can be displayed temporarily by pressing the **INFO button**.



An **INFO** icon at the bottom right above the menu bar also tells you that an info text is available.



If an info text over several pages is available the number of available pages and **P+P– Page ⇅** is displayed in the Info window. You can scroll through the individual info pages with **P+** and **P–**.

Permanently display or hide the automatic info display

Once you have become familiar with how to operate the TV set, you can switch off the automatic info display.

➠ In normal TV mode, without other displays.

MENU Call **TV menu**.



◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Miscellaneous**,
▼ go to the menu line below.

◀ ▶ Select **On-screen displays**,
▼ go to the menu line below.

◀ ▶ Select **Automatic info**,
▼ go to the menu line below: **yes / no**.

The index in the TV set

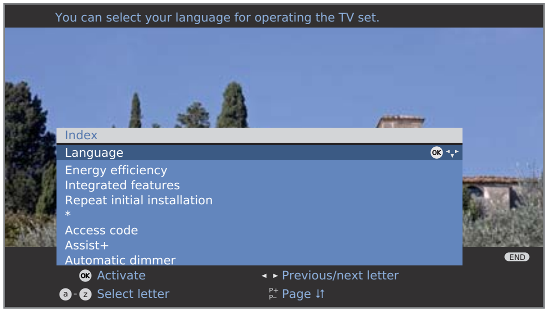
You can start all wizards and many operating functions directly from this point. The complete function scope of the TV set can thus be easily understood.
Alphabetic sorting is preceded by the items **Language**, **Energy efficiency**, **Integrated features** and **Repeat initial installation**.

Call index

➠ In normal TV mode, without other displays.

INFO Call **Index**.

You will see an info text for the highlighted keyword in the info display. If MHEG-5 is active, call the status display with **INFO** and press **INFO** again for index.



If an OK symbol appears in the marked line, this function can be called directly with **OK**.

Selecting a keyword

Enter initial letters with the **numeric buttons** like with a mobile phone keypad (see page 16).

or go with:

◀ ▶ to the preceding / next letters,

▼ ▲ from line to line,

P+/P– scroll backwards or forwards in whole pages.

Example: You want to have the TV set switch off automatically at a specific time:
Select the item **Switch off → Automatic**, you go to the setting with **OK**.

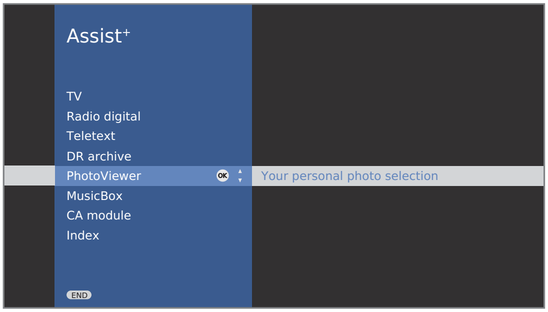
The Assist+ menu

The most important additional functions of the TV set can be called directly by the Assist+ menu.

Call Assist+

ASSIST Call **Assist+** menu.

▲ ▼ Select additional functions.
OK calls the function.



Description of the individual functions:

TV:	See page 20 onwards.
Radio digital:	See page 38.
Teletext:	See page 36 onwards.
DR archive:	Menu item only appears if the TV set is equipped with Digital Recorder; see Digital Recorder operating instructions.
PhotoViewer:	See from page 60.
MusicBox:	See from page 62.
CA module:	Menu item only appears if a CA module is plugged (see page 42) and a digital station is selected.
Index:	See left column.

Operating convenience

TV menu – Overview diagram

TV menu

- **Picture**
  - Picture adjustment
  - Contrast
  - Colour intensity
  - Colour temperature
  - Brightness
  - Sharpness
  - Digital Noise Control (DNC)
  - more...
    - Image+ Active
    - Picture format
    - Move picture up/down [1]
    - Auto format
    - Film quality improvement (DMM)
    - Automatic dimmer
- **Sound**
  - Sound via [1]
  - Sound effects
  - Sound adjustment
  - Headphone volume
  - Loudness
  - Sound-picture synchronisation
  - more...
    - Loudspeaker sound [1]
    - Headphone sound [1]
    - Auto volume
    - AV output signal
    - Maximum volume
    - max. switch on volume
    - Volume adjustment for current station
    - Balance
    - Auto speech detection
- **Recording**
  - Recording wizard
  - Timer list
  - Pre-record time
  - Post record time
- **Connections**
  - New devices/modifications
  - Sound components
  - Antenna DVB
  - Digital Link Plus
  - Miscellaneous
    - Manual adjustment of AV standard
    - Assign digital audio input
    - Allow switching voltage
    - RGB insertion at AV2
    - Remote TV switch on via Digital Link HD
    - Gaming mode
- **Settings**
  - Stations
    - Search wizard
    - Manual adjustment
    - Change stations
    - Select/change favourites
  - Parental lock
  - Timer functions
    - Switch off today only
    - Switch off daily
    - One-time reminder
    - Wake up Mon-Fri
    - Wake up Sat
    - Wake up Sun
    - Wake up with
    - Wake up signal volume
  - Language
    - Menu language
    - Subtitles (DVB)
    - Audio (DVB)
  - Energy efficiency
    - Eco standard
    - Premium mode
    - Shop mode
  - Miscellaneous
    - On-screen displays
    - Time and date
    - Software update
    - CA module: xxx [1]
    - DVB settings
    - Rotate TV [3]
    - Format integrated hard disk [2]

[1] Menu items appear, depending on the signal source currently selected (DVB or analogue) and/or at definite presettings in the relevant menus. For individual details, see the corresponding chapter of the operating instructions.
[2] Menu item only appears in sets with DR+, see operating instructions of Digital Recorder.
[3] Menu item only appears with motor control/RS 232 upgraded and a stand with motor drive is used (see page 72).

Radio menu – Overview diagram

Radio menu

- **Sound**
  - Sound via [1]
  - Sound effects
  - Sound adjustment
  - Headphone volume
  - Loudness
  - more...
    - Auto volume
    - Maximum volume
    - max. switch on volume
    - Volume adjustment for current station
    - Balance
    - Auto speech detection
- **Stations**
  - Search wizard
  - Manual adjustment
  - Change stations
  - Select/change favourites
- **Timer functions**
  - Switch off today only
  - Switch off daily
  - One-time reminder
  - Wake up Mon-Fri
  - Wake up Sat
  - Wake up Sun
  - Wake up with
  - Wake up signal volume

Other menus – Overview diagram

EPG menu

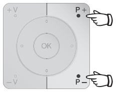
- Select provider [1]
- Station selection
- Data capture
  - off
  - on (only for DVB)
  - on (for DVB + analogue)
- Switch on TV when marked
  - no
  - yes
- Sorting
  - corresponding to station list
  - chronologically

Teletext menu

- Station selection
- Newsflash
- Reveal
- Recording wizard
- Settings
  - Preview pages
  - Sub-title pages
  - Personal text pages
  - Character set
  - HiText
  - Page format

Select station

With the keys P+ and P - on the remote control



P+/P– Station up/down.

The station display with sound identification is displayed briefly.

- If favourites are selected, the station in the favourites list is switched over with **P+/P–** (see page 21).
- If other languages or DVB subtitles are available on DVB stations, the language and subtitle selection is displayed under the station display.
  See also 27: Additional selection possibilities for DVB stations.

With the numeric keys of the remote control

1-digit stations



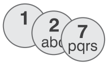
long

Keep the **numeric button** pressed for one second, the station changes immediately.

or:

Press **numeric button** briefly, the station changes after 2 seconds (immediate change for up to 9 stored stations).

2-digit and 3-digit stations



short short long

Press first (and second) **numeric button** briefly.

Keep the last **numeric button** pressed for one second, the station changes immediately.

or:

Press all the **numeric buttons** briefly, the station changes after 2 seconds (changes immediately in case of up to 99 or 999 stored stations).

4-digit stations



all short

Press all four **numeric buttons**, the station changes immediately.

- If favourites are selected, you can switch to the station in the favourites list with the numeric buttons (see page 21). Maximum two-digit station numbers are possible.
- When you select an empty memory location, the TV switches to the next available station.

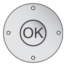
Call last viewed station (for TV sets with MHEG-5 software)



▲ ▼ You can switch back and forth quickly between two stations using these buttons.

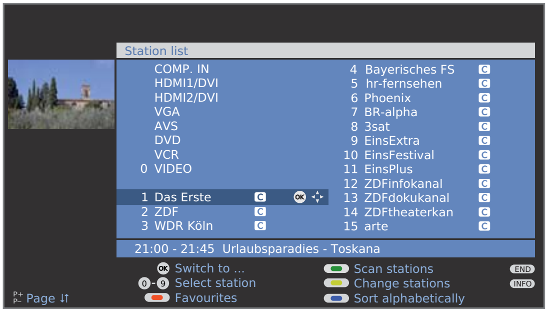
With the station list

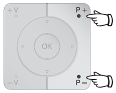
- In normal TV mode, without other displays, no favourites selected:



OK Call **Station list**.

Sorting numerically





P+/P– Scroll in the pages of the station list.



◀◀ ▶▶ Jump to the next station block.



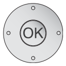
▲ ▼ ◀ ▶ Mark stations.



or:

Enter the number of the station with the **numeric buttons**.

The marked station is shown as a small picture.

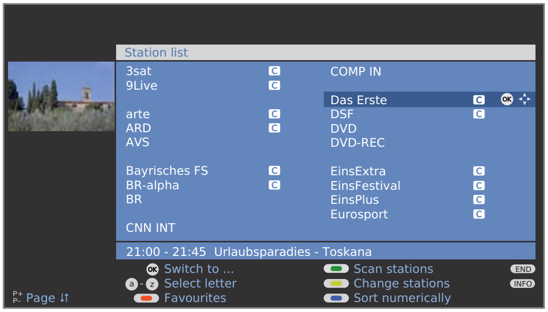


OK The marked station is called.



Blue button: Changes the sorting between **numerically** and **alphabetically**.

Sorting alphabetically





Enter initial letters with the **numeric buttons** like with a mobile phone keypad (see page 16).
The first station for the specified letters is marked.



▲ ▼ ◀ ▶ Mark stations.

OK The marked station is called.

Daily operation

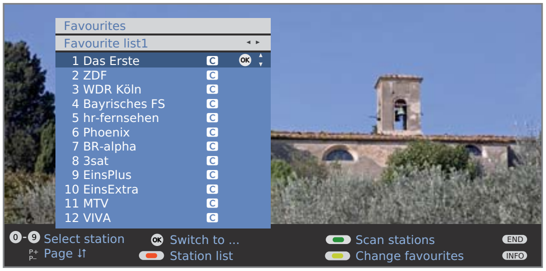
With the favourites lists

You can save and call your favourite stations in 6 favourites lists (e.g. for multiple users). Each favourites list can contain up to 99 stations. After initial installation, 10 stations from the station list are already stored in the first list. Change the favourites list to suit your requirements (see **Put together / change favourites lists** on page 29).

➠ In normal TV mode, without other displays:

OK calls the station list.

Red button: Calls the favourites list.



Select station directly with **numeric buttons**. Or:

▲ ▼ Mark stations.

P+/P– Scroll in the pages of the favourites list.

◀ ▶ Select other favourites list.

OK The marked station is called.

➠ Other favourites lists can only be selected if these contain stations.

Red button: Back to the station list.

Green button: Scan all stations of the currently selected favourites list.

Yellow button: Change the Favourites lists, see page 29.

Explanation of the favourites lists:

The selection made with the red button (favourites list) is retained until you switch back to the station list with the red button.

If favourites are selected, the name of the favourites list appears in the status display after the station name after changing stations.

Explanation of the icons following station names:

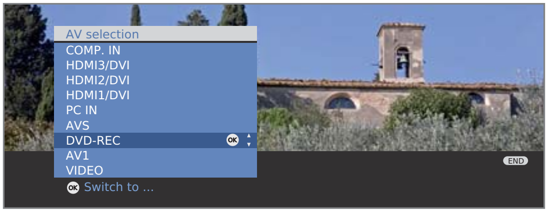
- **T** Digital DVB-T station (terrestrial via antenna)
- **C** Digital DVB-C station (via cable)
- **S** Digital DVB-S station (via satellite)
- Coded station
- CI Plus coded station
- Locked station (see Parental lock on page 41)

Select video source

➠ Please ensure that the appropriate devices have also been registered with the connection wizard (see page 46).

With the AV selection

Call **AV selection**.



▲ ▼ Select desired device or connection,

OK switch over.

A signal from the selected video source should now be visible.

With the station list

➠ In normal TV mode, without other displays:

OK Call the station list.
If the favourites list is displayed, switch to the station list first.

In numerical sorting the connections or devices are always at the beginning of the list.

In alphabetic sorting, the connections or devices are sorted in alphabetically.



▲ ▼ ◀ ▶ Select connection/device.

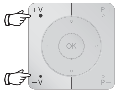
OK Switch over.

Adjusting the sound

Switching sound on/off

Sound off;
Sound on: Press button again or set volume **V+**.

Setting the volume



V+/V– Volume louder / quieter.

The volume bar will be shown briefly if no other menu is displayed.

Call Sound adjustment

Call **Sound adjustment**.



Select sound adjustment by pressing several times.

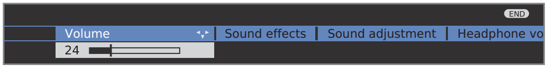
or:

◀ ▶ Select sound adjustment.

Other sound settings in volume setting and sound adjustment

➠ As long as the volume bar or the selection of the sound adjustment is still visible:

▲ Call additional sound settings.



◀ ▶ Select sound setting,
▼ go to the menu line below.

◀ ▶ Make changes.

Sound settings via the TV menu

➠ In normal TV mode, without other displays.

MENU Call **TV menu**.

◀ ▶ Select **Sound**,
▼ go to the menu line below.

◀ ▶ Select desired sound setting,
▼ go to the menu line below.

◀ ▶ Make changes.

Explanations of the sound settings:

Sound via: Playback over the TV speakers, active speakers, Loewe Auro, Loewe Individual Sound Projector or an external hi-fi amplifier.
The selection active speakers, hi-fi/AV amplifier or Sound projector is only possible if these have been logged in in the audio component wizard. The Auro selection is only possible if a Loewe DVD Preceiver Auro is connected.
The menu item **Sound via** does not appear if **TV speakers** or **TV speakers + active subwoofer** is set in the audio components wizard.

Sound effects: Set sound effects Stereo, Panorama, 3D Surround. **Panorama** gives the stereo sound a virtual base widening. **3D Surround** converts a stereo signal into a virtual surround signal.

Sound adjustment: Speech, Classical, Pop, Custom music and film sound. You can set the treble and bass for music and movie sound.

Headphone volume: Adjust the headphones volume.

Loudness: Proper boost of bass and treble tones at low volume.

Sound-picture synchronisation: If the sound does not exactly match the picture, you can correct it here. If you move to the left in the bar you delay the sound in relation to the picture. If you move to the right you accelerate it in relation to the picture. The sound is adapted in time steps of 10ms each.
The Sound-picture synchronisation menu item only appears for DVB stations.

more ... Call with **OK** (see next page).

Daily operation

Explanations of the sound settings:

more ...

Loudspeaker/ Headphone sound	Selection possibility Mono/Stereo or Sound 1 or Sound 2 for two-sound broadcasts separately for speakers and headphones. Only available with analogue stations.
Auto volume	Reduces volume differences, e.g. for advertisements that are too loud.
AV output signal	Sound selection for two sound broadcasts.
Maximum volume	Determining the maximum volume that can be set.
max. switch on volume	Specify the volume that is set when switching on the TV set with the power switch. If the volume is higher when switching the TV set to the standby mode than specified here, then it is reduced automatically to the fixed maximum switching on volume when it is turned on again.
Volume adjustment for current station	The volume can differ according to the individual stations. If the sound is too loud or too quiet in relation to other stations, adapt the volume. When the menu is open, you can select the stations one after another with **P+/P–** and adjust every single station conveniently.
Balance	Set stereo balance so that the volume impression is identical on the left and right.
Auto speech detection	If the automatic speech detection is activated, the sound of the current programme is automatically output with optimum comprehensibility when speech is detected.

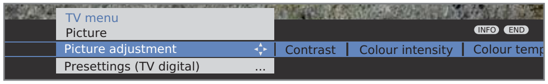
Adjusting the picture



Call **TV menu**.



◄ ► Select **Picture**,
▼ go to the menu line below.





◄ ► Select the desired picture function,
▼ go to the menu line below.

◄ ► Make changes.

Explanations of the picture settings:

Picture adjustment	Switches the picture parameters between personal settings and energy efficiency presettings.
Contrast	Adjust contrast. The power consumption of the TV set is directly dependent on the value set here (see also page 14).
Colour intensity	Adjust the colour.
Colour temperature	Set warmer or colder tone for picture.
Brightness	Adjust the brightness of the picture.
Sharpness	Adjust the contour sharpness of the picture.
DNC	Removes or reduces the signal noise in the picture.
more ...	Call with **OK**.
Image+ Active	Picture improvement on/off and demo mode for Image+ Active.
Picture format	Set picture format (see right hand column).
Move picture up/down	Move picture vertically (see page 25).
Auto format	Automatic detection and setting of the picture format for Cinemascope or widescreen movies.
DMM	Reduce jolting.
Automatic dimmer	The TV picture adapts to the ambient brightness. The energy consumption of the set is reduced by contrast reduction in a lower ambient brightness. The contrast and energy consumption increase with a high ambient brightness.

Presettings / Personal settings for picture adjustment

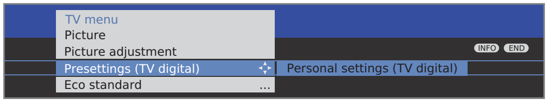


Call **TV menu**.



◄ ► Select **Picture**,
▼ go to the menu line below.

◄ ► Select **Picture adjustment**,
▼ go to the menu line below.





◄ ► Select **Presettings** or **Personal settings**.
▼ For presettings, go to the menu line below.
◄ ► Select the desired presetting for the picture.
OK Confirm selection.

Explanations for Picture adjustment:

Custom adjustments of contrast, colour intensity, colour temperature, brightness, sharpness and digital noise control are saved in the **Personal settings**. Every signal source has its own personal settings.
By selecting **Presettings** the picture settings for the respective currently active signal source are set to predefined values.
For an explanation of the signal sources see glossary: **Signal input groups**.

In the index of the TV set, all the picture and sound adjustments can be reset to the factory values for all signal sources in one step under **Reset picture/sound** or **Factory settings picture/sound**.

Setting picture format



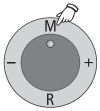
Press the **Picture format button** until the desired picture format is set or press





◄ ► to select the desired picture format.

The **Panorama** picture format can be set between proportionally correct and format filling display. Black bars are visible on the left and right of the picture in the proportionally correct display.



Switch: Keep the **M button** on the TV pressed, at the same time, press the **Picture format button** on the remote control briefly.



Reset: Press the same button combination again.

continued on next page →

Explanations of the picture formats:

➠ The setting options depend on the transmitted picture content.

16:9 Proportionally correct display of 16:9 broadcasts.

4:3 Proportionally correct display of 4:3 broadcasts.

Panorama Proportionally correct or format filling display (as-delivered state) of 4:3 broadcasts on the 16:9 screen. Station logo and subtitles remain visible.
See page 24 for switching the Panorama mode.

Cinema Proportionally correct, format filling display of 4:3 broadcasts on 16:9 screens. Station logo and subtitles usually not visible.

Zoom Proportionally correct display. Maximum picture magnification.

PALplus Is a 4:3-compatible 16:9 picture broadcast supplied by the station which is detected automatically.

If a high resolution video signal is displayed on the TV set or fed in via the interfaces PC IN, HDMI1/DVI, HDMI2/DVI, HDMI3/DVI or COMP. IN, the picture formats 16:9 PC, 16:9 TV, 16:9 Zoom, 4:3 PC, 4:3 TV and 4:3 Zoom can be set.

In the PC formats, the complete picture content will be shown. In the TV formats a small part of the picture is cropped. This may be necessary to hide possible interference at the edge of the picture, which arises from the signal supplied.

Move picture vertically



➠ In normal TV mode without other displays.

▲ ▼ Move picture up/down.

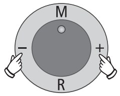


To show subtitles or news tickers which have been cut off, the picture can be moved up or down in the picture formats **Panorama**, **Cinema** and **Zoom** (not with high resolution signal) with the **arrow buttons** ▲ ▼.

➠ For TV sets with MHEG-5 software you can switch back and forth quickly between two stations using these buttons (see also on page 20).

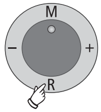
Operation without remote control

Changing the station on the TV set



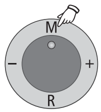
+ / – Station up/down.

Switching radio on or off or switching to radio



R Radio on or switch between TV and Radio.

Calling the TV menu on the set



M Call **Direct control on TV set** menu,



– / + select function.

➠ **Service** is intended for the customer service.

M or **R** Go to the menu line below,
– / + make changes.

M Move up one menu line,
– / + select other function.

Button functions

Every operating mode of the TV set (TV, Radio, Teletext, EPG, PIP, PhotoViewer and DR archive, if equipped with Digital Recorder) has its own menu and own functions for the coloured buttons. The function of the coloured buttons is shown at the bottom of the menus and wizards. Below, some of the function are listed which you need in TV mode for the daily handling of your TV set.

Functions of the coloured buttons in TV mode

➠ The coloured buttons do not work as described below for TV sets with MHEG-5 software, but they operate as described on page 37 (Digital Teletext).

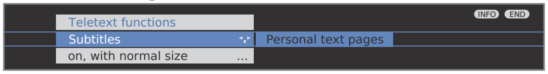
Red button: Freeze on/off.
In sets with Digital Recorder: DR archive on/off.
For TV sets with MHEG-5 software you can open the DR archive via the menu Assist+ (see page 17).

Green button: Open the **Teletext functions** menu.

You can select **Subtitles** and your **Personal text pages** via the **Teletext functions** menu. The operation of subtitles depends on the station selected.

Subtitles

Subtitles analogue stations:



◀ ▶ Select **Subtitles**,
▼ go to the menu line below.

◀ ▶ Select the size of the teletext subtitles,
OK show teletext subtitles.
(display only if subtitles are available)

END: Teletext subtitles off or select **off** in menu.

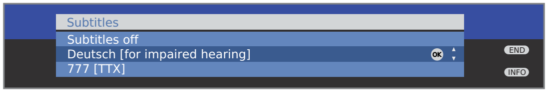
Subtitles DVB stations:

➠ If the DVB station does not provide any subtitles, the menu item **Subtitles** is greyed out and cannot be accessed with **OK**.

➠ The DVB subtitles can also be selected via the status display (see page 27).



◀ ▶ Select **Subtitles**,
OK call.



▲ ▼ Select subtitle mode,
OK show/hide subtitles.

Functions of the coloured buttons in TV mode (Continuation)

Green button: Open the **Teletext functions** menu.



Personal text pages

◀ ▶ Select **Personal text pages**,
OK call.

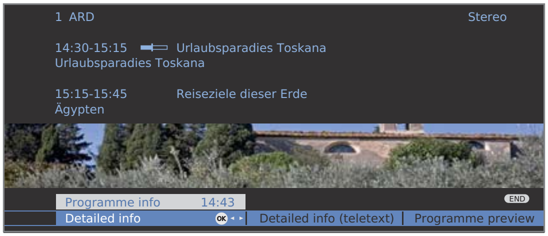


▲ ▼ Select text page,
OK view.

➠ If only one text page is defined, no list will be shown and the Teletext page will be opened immediately. To define your personal text pages, see page 37.

Yellow button: Go to the last viewed station.
Use this button to quickly switch back and forth between two stations. For MHEG-5 see page 18 or on this page at the right lower column.

Blue button: Show programme info.
The programme info of the following programme is displayed additionally for DVB stations. For MHEG-5, no programme info is available.



Explanation of the symbols in the programme information:
- Programme in 16:9 picture format
- Programme in high picture definition (HDTV)
- Programme with Dolby-Digital sound
- Broadcast of subtitles for the deaf and hard of hearing
- Programme with youth protection (see **Parental lock - Age-related lock** on page 43).

The symbols may also appear in combinations.

Permanent display of time

Press twice in rapid succession:
Time is shown/hidden permanently.

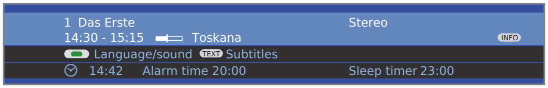


Daily operation

Status display

➠ In normal TV mode, without other displays.

END **END:** Show/hide status display.
For MHEG-5, **INFO button**.



You will see the number and name of the station and the title of the current broadcast (if available) and the sound identification in the top two lines.
The bar (if available) indicates the progress of the current programme.
If information about the current programme is available, this can be called with the **INFO button**, the button is displayed on the right in this case.
For MHEG-5, no programme info is available.

A selection (see right hand column), the time and, if activated, the alarm time and switch-off time appear at the bottom depending on the DVB station.

Explanations of the sound identification:

Transmitted audio signal:

Mono	Mono audio transmission analogue
2-sound	Two sound broadcast (Sound1/Sound2) analogue
Stereo	Stereo sound transmission analogue
PCM	Stereo sound transmission digital

Used loudspeakers:

🔈2 Playback via TV loudspeakers (L/R Stereo).

Additional selection possibilities for DVB stations

In the status display additional selection possibilities can be offered for specific programmes depending on the DVB programme provider.

➠ The **coloured buttons** do not work as described below for TV sets with MHEG-5 software, but they operate as described on page 37 (Digital teletext).

➠ If you press one of the **coloured buttons** or the **TEXT button** while the status display is on, the appropriate selection menu is displayed.

➠ The selection line is also displayed automatically when a new broadcast with different options to the previous broadcast begins or when you switch stations.

The selection menus are only available as long as the status display is shown. However, you can call them again by pressing the **END button**.

Red button: Channel selection for multi-channel providers

Green button: Language/sound
The sound formats on offer and their designations depend on the programme being broadcast.

Yellow button: Time selection

TEXT **TEXT:** Subtitles
The subtitles available depend on the programme being broadcast

Other setting options for DVB stations

You can make general presettings for DVB stations under **TV menu → Settings → Miscellaneous → DVB settings**.

Subtitle mode — Here you can preset whether a subtitle is always to be displayed as soon as it is offered by the station. A special subtitle for impaired hearing can also be selected.
Subtitles are not offered by all stations. Many stations only broadcast subtitles by teletext.

Audio mode — Here you can preset whether you always want to hear a special sound for impaired sight as soon as it is offered by the station.

DVB character set — Select the DVB character set so that the title of the broadcast of your favourite received station or the texts of your CA module are displayed correctly.

Managing stations

TV stations

Various options for managing stations are available via the TV menu. For example the description for TV stations. For radio stations the same applies, except that the Radio menu is called in Radio mode (see also page 38).

➠ Station management is not possible if a programmed timer recording is still pending.
➠ If at least one station is locked the access code must be entered before search/update (see Parental lock on page 43).

Search/update stations – Search wizard
In the search/update with the search wizard, new stations are searched for which have not yet been stored.

➠ You have to repeat the initial installation (see page 13) and automatically search for new ones if you want to delete all the existing stations and automatically search for new ones. Do also use the first installation if you want to change to receiving MHEG-5 stations (attend restrictions for DVB software update, see page 40).

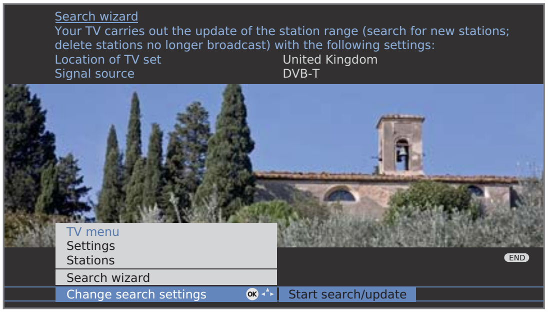
MENU Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Stations**,
▼ go to the menu line below.

◀ ▶ Select **Search wizard**,
▼ go to the menu line below.

In the upper info text the current search settings will now be displayed:



If you want to change these search settings:

◀ ▶ Select **Change search settings**,
OK wizard prompts search settings.

If you agree with these settings:

◀ ▶ Select **Start search/update**,
OK start search.

Red button: Abort current search/update.

Explanations of some search settings, including the upgradeable satellite reception:

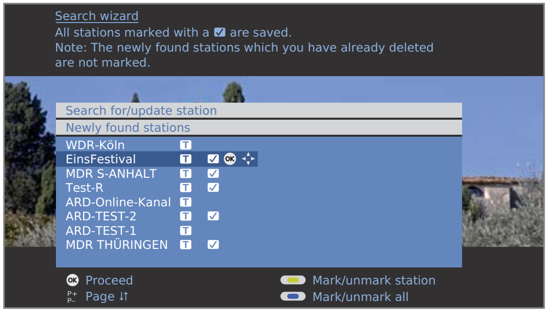
Set location	Select the country for country-specific defaults and station sorting.
Signal source	Here select antenna, cable, or satellite, depending on where you want to search for new stations. Here you can also call a configuration of the DVB-T and DVB-S antennae with the green button (see page 14).
Antenna/cable: TV/colour standard	With selection of set location the conventional TV standard/colour standard is the default. This should only be changed if stations with other standards are to be searched.
Encrypted stations	You can state whether coded stations are to be searched for in the search/update. Select **yes** then coded stations are also searched for. However, these stations can only be received in connection with a CA module and the appropriate Smart Card. Ask your dealer which Smart Card you need to receive certain stations. Handling of the CA module is described on page 42.
DVB-T Search method	If you want to run the station search independently of the channel grid, select **frequency search** for the search method.
DVB-C Settings	With the selection of set location the conventional settings will be preset. Only change this if you know other symbol rates and modulation types or if you have to specify the network ID for your cable network (information available from your cable network provider). If you want to run the station search independently of the channel grid, select **frequency search** for the search method.
DVB-S Settings	If you want to run the station search independently of the channel grid, select **frequency search** for the search method. The symbol rate is specified by the satellite provider and normally does not need to be adjusted.

Managing stations

Search for/update stations – handling of new and no longer found stations

After the automatic search/update has been completed, the number of new found stations is displayed.

OK List of newly found stations.

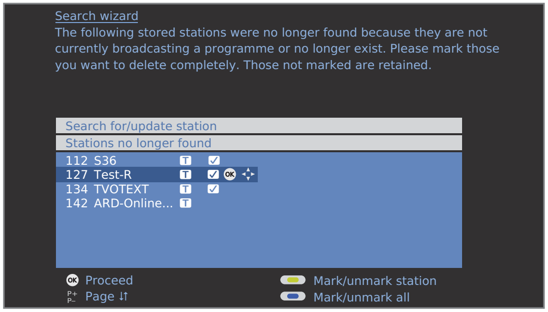


Select station.

Yellow button: Mark / unmark station
Blue button: Mark / unmark all

OK saves the marked station.

Afterwards, if available, a list of the stations which are stored but temporarily not broadcasting or which no longer exist is displayed.
The number of the used memory location is in front of the station. Please select the stations you want to delete permanently.



Select station.

Yellow button: Mark / unmark station
Blue button: Mark / unmark all

OK deletes the selected stations.

END: Exit search wizard.

Search/update station – manual search

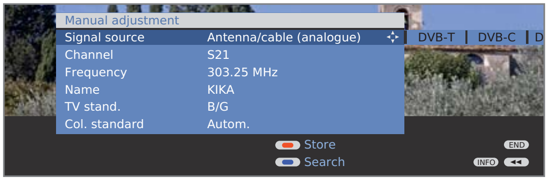
Call **TV menu**.

Select **Settings**,
go to the menu line below.

Select **Stations**,
go to the menu line below.

Select **Manual adjustment**,
OK call input box.

You can enter or edit the station data in the following lines:



Or:

Blue button: Starts **Search** and searches for next station.

Red button: Stores station.

➠ Only the stations for the selected signal source are stored which are not available in the station list.

➠ Stations which are already available for the selected signal source in the station list are displayed with grey shaded station number and name. These stations can only be overwritten with the **red button**.

Explanations of some search settings:

Various settings are possible depending on the selected signal source. Some settings have already been explained in the initial installation (see page 13 onwards).

Signal source	Selection of the range in which you want to search for the station.
Channel	Direct input of the channel.
Frequency	Direct input of the station frequency.
TV stand.	Input of the TV standard of the station, (B/G, I, L, D/K, M, N). Ask your dealer in this regard.
Col. standard	Input of the colour standard of the station, (PAL, SECAM, NTSC-V, PAL60, Autom.). Ask your dealer in this regard.

Managing stations

Change, delete, move, rename, restore station

➠ **Change station** can also be called via the station list (page 20).

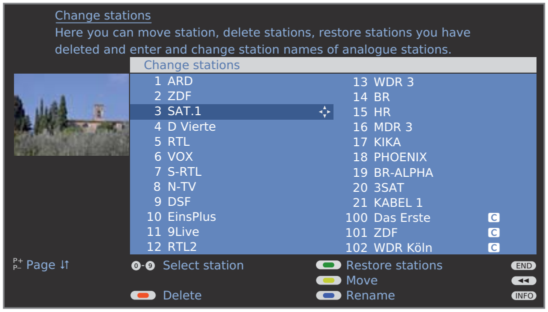
➠ If at least one station is locked the access code must be entered before changing stations start-up (see Parental lock on page 43).

MENU Call **TV menu**.

◂ ▸ Select **Settings**,
▾ go to the menu line below.

◂ ▸ Select **Stations**,
▾ go to the menu line below.

◂ ▸ Select **Change stations**,
OK call list of stations.



In this menu you can delete, move, rename or restore stations.

◂ ▸ ▴ ▾ or **numeric buttons:**
Select the appropriate station.
Scroll with **P+/P–** if necessary.

Delete station

Red button: Starts **Delete** station.

▴ ▾ Select several stations to be deleted if necessary,

OK to execute the delete.

Move station / Change order

➠ Not possible for MHEG-5 stations.

➠ Stations can only be resorted within the signal source block.

Yellow button: Starts **Move** station.

▴ ▾ mark several stations if needed,

OK selection ended,

▴ ▾ Select insertion position from which the selected stations are to be inserted,

OK to execute the move.

Rename station

➠ Not possible for MHEG-5 stations.

➠ DVB stations which also transmit the station name cannot be renamed. In this case, the **Rename** function is hidden.

Blue button: Starts **Rename** station.

Under the 1st letter of the name you will see a line indicating the current input position.

▸ Input position one character to the right (also for blanks).

◂ Input position one character to the left (deletes the character).

Enter the letters one after another with the **numeric buttons** on the remote control. Like using a mobile phone keypad, press a numeric button until the desired character appears. The available letters are printed respectively on the buttons. Different special characters can be selected with button 1.

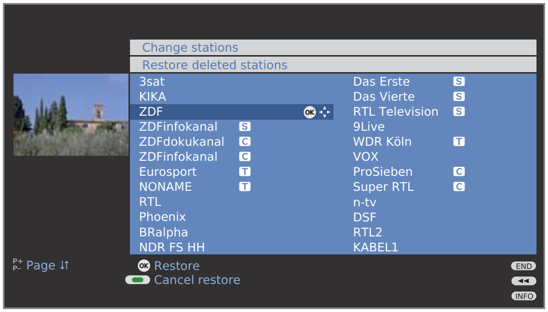
Green button: Switch upper/lower case letters.

OK to save new name.

Restore stations

Stations which have been deleted from the station list can be restored.

Green button: Starts **Restore stations**.



▴ ▾ ◂ ▸ Select station,

OK station is restored.

The restored station is sorted in according to its signal source at the end of the respective signal block.

Put together / change favourites list

Each favourites list can contain up to 99 stations. You can put together the favourites lists to suit your requirements (e.g. topic lists). Other persons using this TV set can create their own favourites lists.
The favourites lists also have the advantage that the stations of different signal sources can be stored in the order you wish.

➠ **Change favourites** can also be called via the favourites list (page 21).

MENU Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Stations**,
▼ go to the menu line below.

◀ ▶ Select **Select/change favourites**,
OK calls list of all stations and last active favourites list.



Green button: Select the next favourites list.

Rename favourites list

➠ Favourites list (right column) must be selected. If not, change the list with ▶ .

Blue button: Starts **Rename favourites list**.

Numeric buttons: Enter new name (same procedure as under Rename station, see page 30).

OK to save new name.

Add station to favourites list

➠ All stations (left column) must be selected. If not, change the list with ◀ .

P+/P– Scroll in the pages of the station list if necessary.

▲ ▼ Mark station or select the station with the **numeric buttons** (enter the initial letters in case of alphabetical station order) which you want to enter in the favourites list.

OK transfers the station to the favourites list. The new station is inserted at the end of the favourites list. Proceed in the same manner with additional stations.

Delete station from favourites list

➠ Favourites list (right column) must be selected. If not, change the list with ▶ .

▲ ▼ mark station to be deleted.
OK removes the marked station from the favourites list.

or:

Red button: Starts **Clear favourites list**.

OK confirms clear favourites list.

Move / change order of stations in the favourites list

➠ Favourites list (right column) must be selected. If not, change the list with ▶ .

▲ ▼ Mark station to be moved.

Yellow button: Starts **Move station**.

▲ ▼ Select insertion position at which the selected station is to be inserted.

The insertion position can also be selected with the numeric buttons.

OK to execute the move.

Picture in Picture

Picture in Picture (PIP)

The concurrent display of two different images is referred to as Picture in Picture.

- The coloured buttons do not work as described below for TV sets with MHEG-5 software, but they operate as described on page 37 (Digital Teletext).
- A concurrent display of two HDTV signals is not possible.
- A concurrent display of two coded stations is not possible.
- Picture change and station selection is restricted during recording.
- In sets **without** Digital Recorder, the PIP mode is restricted to AV-PIP (one TV station and one AV source). If a satellite tuner is upgraded in these sets, PIP mode from digital satellite picture and analogue picture via cable TV or house antenna is possible additionally.

Your TV set distinguishes between two PIP displays:

Split Screen — In this case screen is divided in the middle and the additional PIP image is shown on the right side of the screen. Both images are compressed horizontally and each gets half of the screen.

Small PIP — In this case a small PIP image is inserted in the TV picture.

The PIP operation distinguishes between two functionalities:

Standard PIP — Stations freely selectable and changeable for PIP and TV picture (coloured buttons have PIP-specific meaning, see below).

iPIP — Only in sets with Digital Recorder: The TV picture is moved to the PIP picture when you press the PIP button. The station of the TV picture is now freely selectable. When you press the PIP button again, the PIP picture returns to the TV picture and the PIP window closes.

Start and end picture in picture mode

PIP — Show/hide PIP.

In the Standard PIP function a green frame indicates that the station selection acts on the PIP picture. A white frame means that the operation refers to the main picture. If the frame is blue, the station play is active in the PIP picture. If the iPIP function is activated, this is indicated by an orange frame.

- For TV sets with MHEG-5 Software, you switch from the green bar/frame to the white by using the **PIP** key. The next time you press the **PIP** key, PIP is switched off.

Standard PIP operation:

PIP as freeze picture

- The frame is green, if not, press the **green button**.

Red button: Freeze picture in PIP on / off.

Swap contents of PIP and main picture

- The frame is green, if not, press the **green button**.

Yellow button: Swaps contents of TV picture and PIP picture.

Select the PIP picture

- The frame is green, if not, press the **green button**.

Select the station as usual.



Select the station for the main picture

- The frame is white, if not, press the **green button**.

Select the station as usual.



Scan station in the PIP

- The frame is green, if not, press the **green button**.

Blue button: Start **Scan stations**.

The frame turns blue, the stations now change automatically.

Blue button: Stop **Scan stations**.

The frame is green again.

Picture in Picture

Configure Picture in Picture (PIP) mode

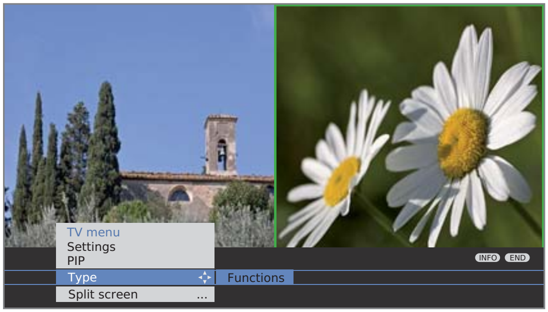
In the PIP menu you can set the PIP type (Split Screen or Small Picture), the PIP function (Standard PIP or iPIP) and the position of the small picture.

Start PIP menu

➠ PIP mode started,
if not, press **PIP button**.

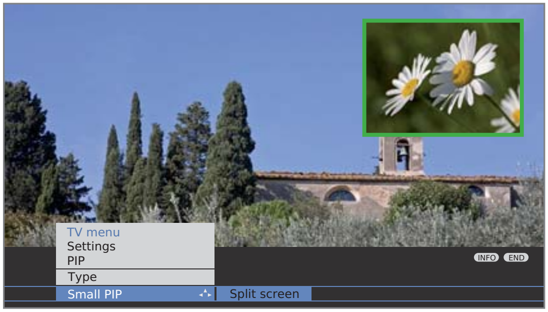
➠ The frame is green,
if not, press the **green button**.

MENU Call the PIP menu.



Switch to Small PIP / Split screen

➠ PIP menu open.





◀ ▶ Select **Type**,
▼ go to the menu line below.

◀ ▶ Select **Small PIP** or **Split screen**.

Change position of the PIP small picture

➠ Other than the status line, which may possibly be displayed, no other display is shown on the screen:



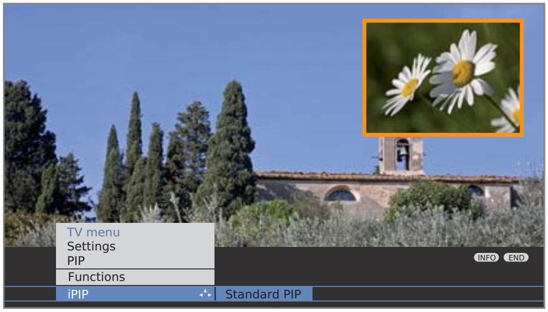


▲ ▼ ◀ ▶ Move the PIP into a corner of the screen.

The position of the small picture can also be selected under **Position** in the PIP menu.

Switch to iPIP / Standard PIP function

➠ PIP menu open.





◀ ▶ Select **Functions**,
▼ go to the menu line below.

◀ ▶ Select **iPIP** or **Standard PIP**.
In iPIP the frame around the PIP picture is orange.

iPIP operation:

PIP When the iPIP function is set, the currently displayed picture becomes the PIP picture on pressing the **PIP button**. You can select other stations for the TV picture and still keep an eye on the PIP picture. You can temporarily “ban” commercials or programme sections to the PIP picture in this way.

PIP The PIP picture becomes the TV picture again (PIP off).

Electronic Programme Guide – EPG

EPG stands for Electronic Programme Guide and provides you with on-screen programme details. With the system, as with a printed programme guide, you can learn about the current programme. In addition programmes can be sorted according to certain topics, memorised, and also recordings can be programmed.

Starting and ending EPG

EPG Switch EPG on / off.

➠ A wizard will guide you through the necessary presettings the first time you start the EPG. If you have analogue reception, you enter the data capture for analogue stations after that (see page 35).

➠ For TV sets with MHEG-5 software, EPG is only possible for DVB-T stations.



The display of the programme guide is divided into two branches. The programme list (bottom) is influenced by certain specifications (top).



Blue button: Switches between the upper default lines **Date, ..., Topics** and the lower programme list.

Switching and memorizing with the programme list

➠ In the programme list first all currently running programmes are listed.

➠ You are in the lower programme list, if not, press the **blue button**.



▼ ▲ Select station.

OK View / Memorise.

View The programme is in progress. The TV set switches to the marked programme.

Memorise The programme has not started yet and is memorised. A ☑ appears in front of the programme. The TV set switches over automatically to the beginning of the programme or, if set in the EPG menu (page 35) on from standby mode.

Adjusting the programme list

➠ The selection is at the top of the specifications, if not, press the **blue button**.



▼ ▲ Select **Date**, **Time**, **Stations** or **Topics**.

◀ ▶ Select defaults within the respective line.



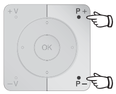
Example If you are searching for the next news, select today's date, **17:00** for example for the time, **all** for station and **News** for topics. Then you get a list of all news programmes from 17.00 h onwards in the programme list below it. The type of list of programmes in the programme list depends on the setting of the **sorting** in the EPG menu (page 35).

Time entry If the line **Time** is selected, then you can enter the time after which the programmes will be displayed, via the numeric buttons of the remote control. The broadcasts are sorted according to the order of the station list within the selected time window.

Stations If a **favourites list** has been selected, only the programmes of stations from the favourites list are displayed in the programme list. A single station can be selected with "**...**". The Select single station window is opened. After selection, only programmes of the selected single station are displayed.

Hint Before pressing the **blue button** to leave the upper selection lines, select one of the preceding lines. If you then switch back to the programme list, you can change this menu line with ◀ ▶, without having to leave the programme list. If you have marked **Time**, then you can enter the time, after which the programmes will be displayed, with the numeric buttons of the remote control.

Paging through the programme list



P+/P– Page backwards / forwards.

In the entries for **Date** and **Time**, you will see changes in time as well as in date when paging. Scrolling in the programme list is also possible when the selection is at the top of the specifications.

Electronic Programme Guide

Calling additional information about the programmes

➠ Brief information about many programmes is displayed below the programme list of the broadcasts.

TEXT — You can call detailed information with the **TEXT button** if this function is offered by the TEXT icon in the lower left. The symbol explanations are described on page 26.

Programming a recording for a recorder

➠ The selection is in the lower programme list, if not, press the **blue button**.

▼ ▲ Mark the desired programme.

RECORD button: Starts recording wizard.

Change or confirm timer data if necessary (see page 57, "The direct way to record").

Then a **red dot** will be displayed in front of this programme as an identification.

RECORD button: Deletes the already programmed recording of the red marked programme from the timer.
If the timer data have been transferred to an external recorder, then the timer must also be deleted there.

Configuring EPG

Start the EPG menu

➠ EPG mode is started, if not, press the **EPG button**.

MENU — Call the **EPG menu**.



Settings in the EPG menu:
Select provider (only for analogue stations), **Station selection, Data capture**, **Switch on TV when marked**, **Sorting**.

Explanations of setting possibilities in the EPG menu:

Select provider — In **analogue TV reception** there may be different providers who transmit the EPG data for certain station packages. You can have the **list** of providers created **automatically** with the **yellow button** in the **provider selection**. You can select the desired provider at the end of the provider search. You can create the **list** of providers **manually** with the **blue button**.

Station selection — In the **station selection** you can determine for which station in the programme guide information is to be displayed. Only stations with ☑ are shown in the EPG.
With the coloured buttons you can select or remove stations or only select the stations from the favourites lists.
Because of the large number of receivable DVB-S stations you should restrict the station selection. This reduces the data entry time and increases the clarity in the EPG.

Marking the stations according to reception ranges:
E Analogue stations via antenna/cable, for which the current provider supplies data.
T Digital terrestrial stations DVB-T.
C Digital cable stations DVB-C.
S Digital satellite stations DVB-S [1].

Data capture — **on (for DVB + analogue):** Data capture for DVB and analogue stations

on (only for DVB): Data capture only for DVB stations.

off: No data capture.

After changes in the EPG menu or after switching off at the mains switch the EPG data must be collected first.
To do this, switch on the set and select the station from the analogue stations which you want defined as a provider and let the TV set run for about 1 hour with the selected station. Or:
Switch the TV set into standby mode. The display on the TV set glows orange after 2 minutes and the EPG data entry begins.
The data capture normally takes place at night between 2 and 5 o'clock if the TV set is in the standby mode.

Switch on TV when marked — When **yes** is set, the switched off TV switches on automatically from the standby mode at the beginning of a set programme. A screen message appears when switching on. If this is not confirmed within 5 minutes with the **OK button**, the TV switches back off automatically for safety reasons.

Sorting — The programmes can be sorted either according to their start times (**chronologically**) or according to stations (**corresponding to station list**).

[1] if upgraded

Teletext

Your TV set supports the two operating systems TOP Text and FLOF.
Up to 2,000 pages are stored so that you have quick access.

Starting and ending Teletext

TEXT Switch Teletext on / off.



Page selection with the coloured buttons

Red button: Back to the previously viewed page.

Green button: On to next page.

Yellow button: To next topic.

Blue button: To next range of topics.

The coloured bars (for TOP) or the coloured text (for FLOF) in the second last line indicate which coloured buttons you can use to page through topic areas and topics.

Teletext page displays

0 AV: Stop self changing pages.

9: Enlarge page (press several times).

PIP button: Show / hide TV picture (full screen/split screen).



Additional page selection possibilities

1st possibility:

INFO Call **overview page 100**.

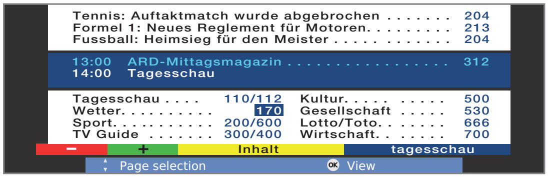
2nd possibility:

Directly enter the page number.

3rd possibility:

➠ The page includes 3-digit page numbers.

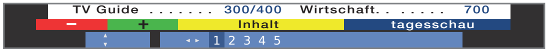
▼ ▲ Mark desired page number.



OK Call the page.

4th possibility:

➠ The page consists of several sub-pages indicated by the selection option on the last line.

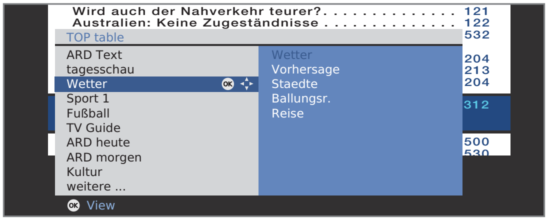


◀ ▶ Page through sub-pages.

Call TOP table

➠ The table can only be called for stations with the TOP operating system.

OK Call **TOP table**.



▼ ▲ Mark topic area,
◀ ▶ select topic column,
▼ ▲ select topic,

OK call the page.

Programming timer recordings via Teletext

➠ Teletext is started,
if not, press the **TEXT button**.

Call the programme pages of the current station.

Green button: Go to the appropriate page.

▼ ▲ Select the desired programme,
OK to programme the recording.

Change the appropriate recording data in the following menu **Timer data** (see also page 57, "The direct way to record").

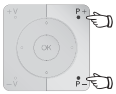
OK Confirm.

Changing teletext station

You can change the teletext provider independently of the station you are watching.

➠ In TV sets without Digital Recorder it is not possible to change the teletext station initially. However, if a satellite tuner is retrofitted to these sets, an analogue station (via antenna or cable) and a digital satellite station can be used for simultaneous display of sound and teletext.

➠ Teletext is started, if not, press the **TEXT button**.



P+/P– Select next/previous station.
The TV set switches through all the stations in the station list or the current **Favourites** list one after another (see page 21).

Or:

Call **Teletext menu**.

◀ ▶ Select **Station selection**,
OK call station.

◀ ▶ ▲ ▼ Select station as in the station list (page 20),
OK call station.

Teletext menu

In the Teletext menu you can activate messages, reveal pages and configure the teletext with the **Settings** menu function.

Starting the Teletext menu

➠ Teletext is started, if not, press the **TEXT button**.

Call the **Teletext menu**.



Explanations of the Teletext menu functions:

Station selection	You can select the teletext of a different station here (see left hand column).
Newsflash	The current page is hidden when you activate **Newsflash**. A symbol at the top left indicates that the function is active. If the contents of the message are updated and it is a small newsflash, this is displayed in the TV picture. If it is a full screen page, the symbol is displayed in blue and the page can be called with the **OK button**.
Reveal	Shows concealed information, e.g. for quiz questions or VPS pages in the programme preview pages.
Recording wizard	A wizard for **recording** via teletext helps to programme an external recorder or the integrated Digital Recorder, see also left column.
Settings	Other Teletext menu functions:
Preview pages	Input of the first teletext programme preview page if this deviates from the factory setting (page 301).
Sub-title pages	Input of the teletext subtitle pages for every station if this deviates from the factory setting (page 150).
Personal text pages	Define up to six teletext pages which can be opened later from a list in the menu **Teletext functions → Personal text pages** (in TV mode press **green button**, see page 26).
Character set	Teletext character set can be switched to other languages (Russian, Greek, Polish and Turkish).
HiText	Improved graphic representation of the Teletext. (Not offered by all stations.)
Page format	Select side format for full screen visualisation of the Teletext (16:9 or 4:3).

Teletext

Digital teletext (MHEG-5)

In the UK or Ireland, the teletext for DVB-T stations is transmitted as per the MHEG-5 standard. It contains text, graphics, functions and links.

➠ Only for TV sets with MHEG-5 software.

➠ At the moment only available in United Kingdom and Ireland.

➠ Digital teletext is not available when DVB subtitles are being displayed.

The operation of these menus depends on the particular provider. Normally after a station is changed, the provider broadcasting the digital teletext makes an introductory offer for this service on the screen via menu selection. Follow these notes.

If no message appears telling you how to switch to digital teletext after switching to another station, press the **TEXT** key. If a selection for DVB subtitles is available, this item must be hidden before.

Depending on the provider's respective offer, you can use the ▲ ▼ ◀ ▶ buttons and the **OK button**, the **coloured buttons**, the **END/TEXT button** and sometimes even the **numeric buttons**.

If you want to close the digital teletext, just select a different station using the **P+/P– buttons** or follow the menu prompts on the screen.

Digital radio

Radio mode

The TV set can receive digital radio stations via DVB.
In addition you can play the sound from an external device through the TV set via the audio/AV inputs of the TV set.

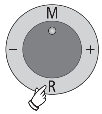
➠ For TV sets with MHEG-5 software, the buttons may be configured differently by the provider.

➠ The **AUDIO button** has been preset for radio operation in the factory. To change the configuration see page 66.

Radio mode on

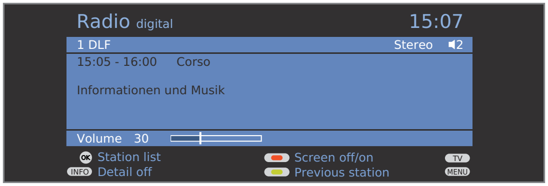


Press **AUDIO button** on the remote control.



Or: Press
R on the operating ring on the TV set.

You see and information window about the currently set station.



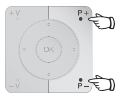


Minimise Radio dialogue to an info line / maximise.

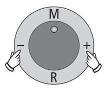


Station switching

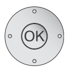
➠ The selection of the stations / favourites is the same as the procedure in TV mode (see pages 20 and 21).



Press **P+/P–** or the **numeric buttons** of the remote control.

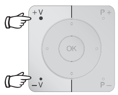


Or: Press
+ / – on the TV set operating ring.



Or:
OK Call **station list / favourites**.

Setting the volume



V+/V– Volume louder / quieter.

Other sound settings are the same as for the volume setting in TV mode (see page 22).

Digital radio

Audio adjustment

Call **Sound adjustment**.
Other settings as for TV mode (see page 22).

Switching the screen on/off

Red button: Switch off the screen.

The **LED display** on the TV set (see page 4) changes from green to orange.

Switch on the screen with the remote control:
Press **Red button**, **AUDIO button** or **OK button** (station list is opened).

Switch on the screen on the TV set:
Press **R** on the TV set operating ring.

Radio menu

In the Radio menu, you can set the sound, search for and store radio stations (automatically or manually), change stations and set switch off/alarm functions.
The settings are made as described in TV mode.

Call radio menu

➠ Radio mode switched on,
if not, press the **AUDIO button**.

MENU Call the **Radio menu**.



Switch off radio mode

TV Press **TV button** on the remote control.

Or: Press
R on the operating ring on the TV set.

EPG – Electronic Programme Guide (radio)

For the DVB radio stations you can also use an electronic programme guide, if the station that is currently active supplies data.

Starting and ending EPG

➠ Radio mode switched on,
if not, press the **AUDIO button**.

EPG Switch EPG on / off.



➠ The EPG functions in radio mode are the same as in TV mode. Read from page 34 onwards for further information.

Audio playback from external devices

You can play the sound of external AV devices (e.g. MP3 players, DVD players) in radio mode.

Select AV input

➠ Radio mode switched on,
if not, press the **AUDIO button**.

OK Open station list.
The AV inputs are listed in front of the first radio station.



➠ The selection of the AV inputs is the same as in TV mode (see pages 20 and 21).

Start playback on the external device after selecting the AV input.

Software update

TV base software and DVB software

Your TV set provides the option to update the TV basic and DVB software. The current software versions can be installed on your set with a USB stick.

The software can also be updated by different DVB reception paths (DVB-T, DVB-C, DVB-S [1]).
However, the prerequisite for this is that the software is provided by the appropriate DVB reception path.
This may differ depending on the TV set and the DVB programme provided. Ask your local dealer for information whether a software update via DVB reception path is possible.

Automatic information by new software version

In the **Change update settings** menu (see right column) you can determine via which DVB reception path (if possible) you want to receive updates.

Your TV set determines automatically overnight whether a new software version is available via the selected DVB reception path. The TV set must be left in the standby mode for this (do not switch off with the mains switch).

If a new software version is available, the TV set informs you of this in an on-screen message the next time it is switched on (see page 41 – Loading new software).

Manual search for new software

If it is not displayed automatically that a new software is available when you switch on the set, you can also search for one manually. The search depends on the selected update source(s).

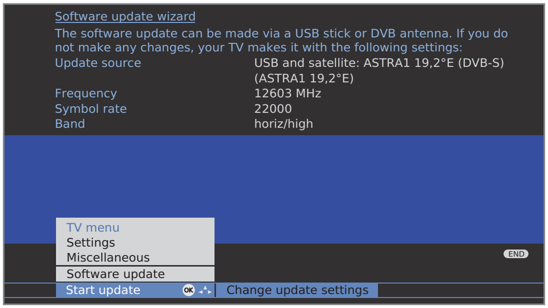
MENU Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Miscellaneous**,
▼ go to the menu line below.

◀ ▶ Select **Software update**.
OK Open the software update wizard.

The current update settings are displayed in the info text.



If you want to change the update settings:

◀ ▶ Select **Change update settings**,
OK the wizard polls the update settings.

➠ The selection options depend on the antenna cables connected at the initial installation (see page 13).

USB only
New software is searched for via USB.

USB and DVB-T
New software is searched for first via USB then via DVB-T (digital terrestrial transmission).

USB and DVB-C
New software is searched for first via USB then via DVB-C (digital cable transmission).

USB and satellite
New software is searched for first via USB then via DVB-S (digital satellite transmission). The name of the currently selected satellite is displayed.

Setting parameters of the different DVB update sources:

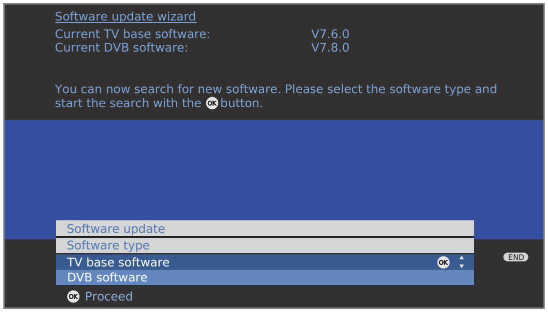
Channel	Select the channel on which the new software is provided.
Frequency	Enter the frequency of the station to be transmitted directly.
Bandwidth	Is preset automatically depending on the selected channel.
Symbol rate	Enter the symbol rate of the station to be transmitted directly.
QAM modulation	Set the suitable type of modulation.
Band	Set the transmission range for satellite reception.

[1] if upgraded

continued on the next page →

If you have adapted the update settings:
OK proceed.

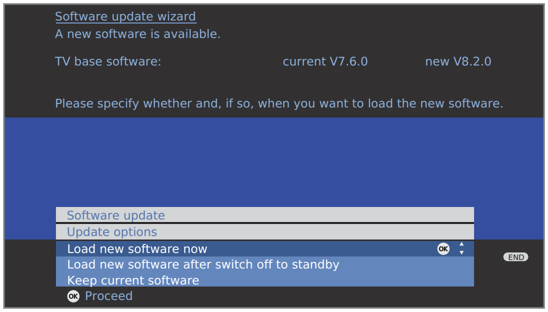
◀ ▶ Select **Start update**,
OK start update procedure.



▲ ▼ Select software type:
TV base software or
DVB software,
OK start search.

If a new software version is available after the search, the following screen message appears.

Loading new software



▲ ▼ Select update option:
Load new software now
Load new software after switch off to standby
(update after switching off)
Keep current software (no update desired).
OK **Proceed** or exit wizard.
OK Start **Software update**.

A bar informs you about the progress of the charging process. Do not switch your set off during this time!

This process can take up to 20 minutes depending on the selected update source. You will be informed at the end.

At the end of charging:
Switch the TV set off and back on with the mains switch. This is unnecessary when loading the software with the **Load new software after switch´off to standby** update option.

If a new software has not been updated by a DVB station, you will be reminded of this several times when switching on the set.

➠ If a new TV software and a new DVB software are available in the automatic search for new software via DVB stations (see page 40), you can choose which software is to be updated.

Software download from the Loewe homepage

You can download new software for your TV set from our homepage. To do this, register on our homepage **http://www.loewe-uk.com** (go to **Support** ⟶ **Registration**). Follow the individual steps through the registration procedure.
After successful registration and following login on the homepage you must still register your equipment (keep article number and serial number at hand - both are on the sticker on the back of the equipment). You will then see an overview of downloadable contents for your TV set, including TV software. Load the software onto a USB stick to update the files.
Then carry out the updating procedure (see page 40).

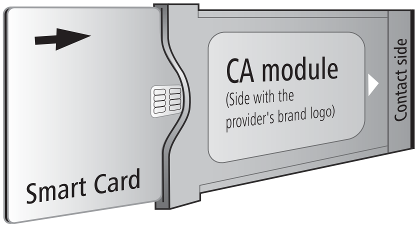
Conditional Access module (CA module)

In order to be able to receive digital stations, a Conditional Access module (CA module) and a Smart Card must be inserted in the CI slot of your TV set (see pages 5 to 7).
The CA module and the Smart Card are not part of the TV set's scope of delivery. They are usually available from your dealer. Loewe provides no guarantee for the functioning of the CA module.

The TV set must first recognise and set up the CA module during initial operation. Therefore, it can take up to a minute until decoding starts during initial operation.

Inserting the smart card into the CA module

Push the Smart Card into the CA module as far as it goes so that the side with the gold coloured contact chip is facing the side of the CA module marked with the provider's logo. Note the direction of the arrow printed on the Smart Card.



Inserting the CA module in the CI slot

➠ Switch off the TV set's power switch.

Open the cover on the rear of the set.



Insert the CA module carefully into the CI slot with the contact side first.

If you are standing in front of the TV set (display) then the logo on the CA module must be pointing to the rear. Do not use force. Make sure the module is not twisted in the process.

The eject button protrudes slightly when the CA module is inserted correctly.

Searching for encrypted stations

➠ The search wizard must only be started when the setting possibility **no** has been selected for the search for coded stations in first-time start-up or no CA module has been inserted.

MENU Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Stations**,
▼ go to the menu line below.

◀ ▶ Select **Search wizard**,
▼ go to the menu line below.

◀ ▶ Select **Change search settings**,
OK wizard guides you through the search settings.

Description of the search settings, see page 28.

Calling CA module information

➠ This menu is only available with digital stations.

MENU Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Miscellaneous**,
▼ go to the menu line below.

◀ ▶ Select **CA module: xxx**
(xxx corresponds to the CA module provider),
OK call information.

The content of this menu depends on the provider of the CA module.

Removing the CA module



➠ Switch off the TV set's power switch.

Remove the cover from the rear of the set.

Press in the ejection button on the appropriate module drawer, the module is released.

Remove the module from the set.

Replace the cover.

Parental lock

You can select and set various security options to prevent unauthorised use of the TV set and to protect your children from unsuitable programmes.

Defining the access code (PIN)

MENU Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Parental lock**,
▼ go to the menu line below.

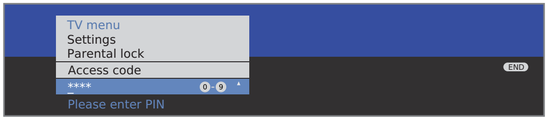
Define a four digit access code (PIN) the first time you open it. The numbers appear in plain text. Note the access code (PIN) well.

OK Confirm the access code (PIN).

The **Parental lock** menu is opened.



The four-digit access code (PIN) must be entered when the parental lock is opened in future. It appears encrypted (****) when entering for security reasons.



Explanations of setting possibilities in the Parental lock menu:

Lock all stations	The TV set is locked immediately the menu is exited. All programmes can then only be watched after entering the access code. The lock can be activated both **Immediately** and for a **Daily** defined period. The lock remains active until it is switched off in the menu.
Lock single stations	You can lock / unlock individual or all of the stations in the station list specifically. The lock remains active until it is switched off in the menu.
Age-related lock	Some DVB stations also broadcast an age classification. If the age set here is below the broadcast age limit, the programme can only be watched after entering the access code.
Change access code	You can change your access code at any time. Enter the new access code in place of the old one.
Deactivate	All set parental locks (locked stations, age-dependent locks, locked films in the DR archive) are cancelled. The current secret code is deleted. When the parental lock is reactivated all the previous parental locks are set again automatically.
Reset	All currently set parental locks are finally cancelled. The secret code is deleted.

Code number

The code number cancels all entered PINs. It can be used for example if you have forgotten your PIN. You will find a note about the code number on page 81. Remove this from the manual and keep it in a safe place.

Protection of minors for CI Plus programmes

Youth-protected broadcasts of programme providers with CI Plus encoding possibly require you to enter the secret number (PIN) of the CA module.
We recommend selecting the secret number of the TV set according to the secret number of the CA module, since the secret number of the CA module cannot be changed. This means that you must only remember one secret number.

Other settings

Timer functions

This menu offers you convenient alarm services. Programmed alarms are also active when the TV set has been switched off to standby.
If the TV set switches on from the standby mode by alarm, a screen message appears. If this is not confirmed within 5 minutes with the **OK button**, the TV switches back off automatically for safety reasons.

The TV set can also be switched off automatically at certain times.

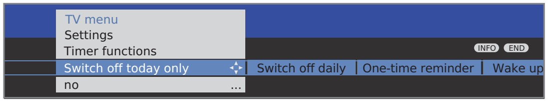
A screen warning appears one minute before automatic switch off. The automatic switch off can be interrupted by pressing any button.

Call Timer functions

MENU Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Timer functions**,
▼ go to the menu line below.



◀ ▶ Select the desired setting.

Explanations of setting possibilities in the Timer functions menu:

Switch off today only	The set switches to the standby mode automatically at the specified time. If a time is specified which has already passed on the same day, the set switches off at this time the next day.
Switch off daily	The set regularly switches to the standby mode automatically every day at the specified time.
One-time reminder	The set alerts you once today at the specified time. If a time was specified which has already passed on the same day, the alarm is saved for the next day.
Wake up Mon-Fri	The set regularly alerts you from Monday to Friday at the set time.
Wake up Sat	The set alerts you regularly every Saturday at the specified time.
Wake up Sun	The set alerts you regularly every Sunday at the specified time.

Explanations of setting possibilities in the Timer functions menu:

Wake up with	Specify whether the TV set switches on in the event of an alarm from the standby mode in **TV** or **radio mode** with the respectively last active station.
Wake up signal volume	Set the desired volume of the alarm tone. The alarm tone is emitted as a continuous tone as a guide during the setting.

Language

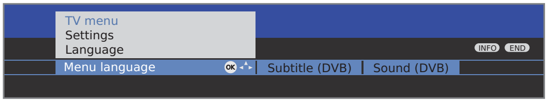
Specify the language for all menus in the TV set in the language menu. The language for the DVB subtitles and the film language can be set for DVB programmes.

Call language

MENU Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Language**,
▼ go to the menu line below.



◀ ▶ Select the desired setting.

Explanations of setting possibilities in the Language menu:

Menu language	You can change the menu language here. The menu language can be changed with the index (siehe Seite 18).
Subtitles (DVB)	If subtitles are provided by the DVB station, you can set your desired language in advance here. If this is included in the range of languages of the station, it will be shown automatically. You can also specify an alternative language under this menu item, in case your chosen language is not offered by the station
Audio (DVB)	Specify your desired film language in advance here. If this is included in the range of languages of the station, it will be shown automatically. You can also specify an alternative language under this menu item, in case your chosen language is not offered by the station.

Other settings

On-screen displays

You can select different settings in this menu which affect the on-screen displays.

Call On-screen displays

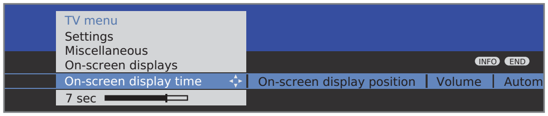
MENU Call **TV menu**.



◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Miscellaneous**,
▼ go to the menu line below.

◀ ▶ Select **On-screen displays**,
▼ go to the menu line below.





◀ ▶ Select the desired setting.

Explanations of setting possibilities in the On-screen displays menu:

On-screen display time Here you set the duration of the display, e.g. for the volume or the station display when changing stations. The duration can be set between 2 and 9 seconds.

On-screen display position You can select between an upper and a lower display position so that other displays (subtitles) are not concealed.

Volume Here you set whether or not the change in the volume should also be displayed visually on the screen.

Automatic info Select **yes** here if you want to be able to see the additional help permanently in the upper part of the screen while navigating the menu. Also see page 16 for further information.

Time and date

If you receive a station with teletext after switching on the TV, the time and date are recorded automatically. The date may have to be entered manually for some stations.

Enter the time and date manually if you receive station without teletext.

Call Time and date

MENU Call **TV menu**.



◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Miscellaneous**,
▼ go to the menu line below.

◀ ▶ Select **Time and date**,
▼ go to the menu line below.





◀ ▶ Select the desired setting.

Explanations of setting possibilities in the Time and date menu:

Time Enter the time (00:00 to 23:59) with the numeric buttons of the remote control.

Deviation from Universal Time The current time at the Greenwich Meridian 0 is to be understood as world time. The time shift in relation to this time must be given in hours (–11 to +13) (with the buttons ◀ ▶ or the numeric buttons on the remote control). Summer time is ignored.

Date Enter the date (day.month.year) with the numeric buttons on the remote control.

Beginning of daylight-saving time Enter the date on which the time is switched over to summer time if it deviates from the automatically calculated date.

End of daylight-saving time Enter the date on which the summer time ends if it deviates from the automatically calculated date.

Operating additional equipment

Connection wizard

The connection wizard serves to connect accessory equipment optimally to the TV set, make changes to the wiring of the devices or remove momentarily logged in equipment. The exact process of the wizard depends on the choice of equipment.

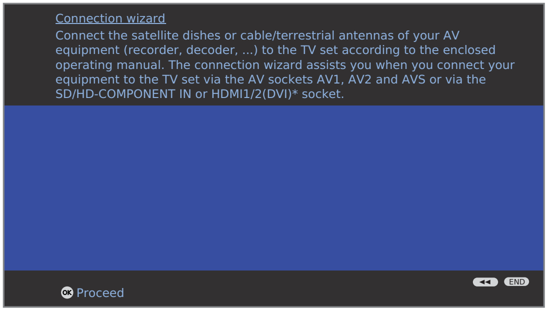
➠ New equipment should not be connected until it has been logged in in the Connection wizard first.

➠ DVD recorder at AV2 is preset at the factory.

MENU Call **TV menu**.

◀ ▶ Select **Connections**,
▼ go to the menu line below.

◀ ▶ Select **New devices/modifications**.
OK calls the wizard.



END ➠ The connection wizard can be exited at any time with the **END button**.

OK Proceed.

The connection diagram shows the currently logged in equipment.

Connection diagram



OK Proceed.

Select the equipment you want to connect or remove equipment you no longer use in the AV equipment selection.

▲ ▼ Select equipment/connection.

Yellow button: Connect/disconnect equipment.

A **Camcorder / camera** is connected to the TV set additionally in the following example.

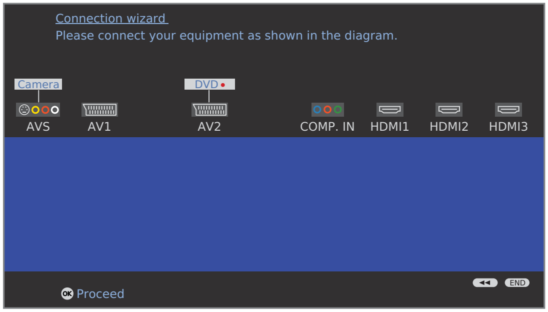
AV equipment selection



OK Proceed.

The connection diagram is displayed again. Connect the equipment to the corresponding connections of the TV set as shown in the connection diagram.

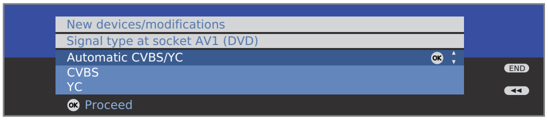
➠ The accessory equipment should be connected to the TV set with the power off (disconnected from the mains). See also the instructions in the operating manual of the equipment to be connected.



OK Proceed.

continued on next page ⟶

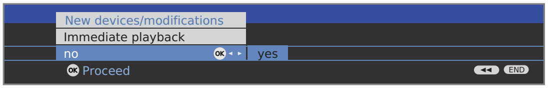
Signal type



▲ ▼ Select the signal types of the individual devices one after another where necessary.
Normally you should leave the setting on **Automatic CVBS/YC** (e.g. for DVD player/recorder) or **Autom.-VHS/SVHS** (e.g. VCR), otherwise select the suitable signal type.

OK **Proceed**.

Immediate playback



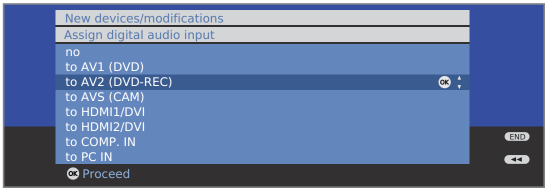
◀ ▶ Select **yes** or **no**.

If playback is started on a device connected to AV1 or AV2, the TV switches immediately to the appropriate AV input when **yes** is set.

When playing devices with Digital Link Plus, the appropriate AV input is always switched to regardless of the setting.

OK **Proceed**.

Assign digital audio input



➠ The menu item only appears for certain presettings in the Sound components wizard or with retrofitted AC3/dts module (accessories see pages 73 and 74).

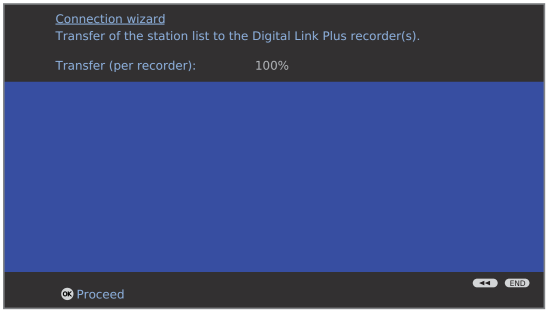
▲ ▼ You have to feed the digital audio signal to the TV set for the digital audio reproduction from an external device.

The digital audio input (**AUDIO DIGITAL IN**) of the TV set must be assigned to the appropriate connection of the external device.

If **no** is selected, the analogue sound is used.

OK **Proceed**.

Digital Link Plus



If you have registered a recorder into the connection wizard, the Digital Link Plus transmission starts.

If a Digital Link Plus capable recorder is connected, the station list of the analogue stations is transmitted to the external recorder.

You can also call Digital Link Plus under **TV menu → Connections → Digital Link Plus**.

END **END:** Exit connection wizard.

Gaming mode

For the inputs of your TV set on which game consoles, PC applications or even Karaoke machines are operated, we recommend you to activate the **Gaming mode**. Your activities are then displayed quicker on the screen by reducing the complex picture improving techniques.

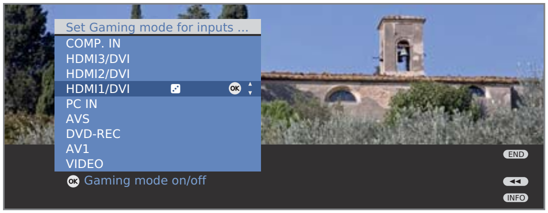
MENU Call **TV menu**.

◀ ▶ Select **Connections**,
▼ go to the menu line below.

◀ ▶ Select **Miscellaneous**,
▼ go to the menu line below.

◀ ▶ Select **Gaming mode**,
OK call.

▲ ▼ Select socket,
OK **Gaming mode** for selected socket **on/off**.



You can recognise AV connections with set Gaming mode by the symbol ◘ after the connection name.

Operating additional equipment

Devices to the connections AV1/AV2/AVS

Accessory equipment such as DVD players, video and DVD recorders etc. can be connected to the TV set at the Euro-AV sockets **AV1** and **AV2** (see pages 5 to 7).

The AV input **AVS** (see pages 5 to 7) offers the possibility of connecting a digital camera or a camcorder for example.

➠ All devices at the AV inputs must be registered in in the connection wizard (see page 46 onwards).

The connection designations vary according to the logged in device. The AV selection then contains, for example, **DVD** in place of AV1 or CAM in place of AVS.

The Euro-AV sockets can process different signal types. Which signal type your accessory device provides can be found in the operating manual of the appropriate device.

Owing to the large number of AV devices available on the market, we can only mention a few examples for the connection of accessory equipment to the AV sockets here.
The following description of the connected equipment to the connections AV1/2/S refers to the device types logged into the connection wizard from page 46 onwards.

If the sound of a device connected to an AV socket is to be transmitted digitally, a cinch cable must be plugged between the coaxial digital output of the accessory equipment and the **AUDIO DIGITAL IN** socket of the TV set. In addition the digital audio input must be assigned to the corresponding AV socket in the connection wizard (see page 47).

The assignment of the digital audio input may also take place outside the connection wizard. With **TV menu → Connections → Miscellaneous → Assign digital audio input**, the digital audio input can be assigned to the appropriate AV socket, see page 56.

Connecting a DVD player to the TV set

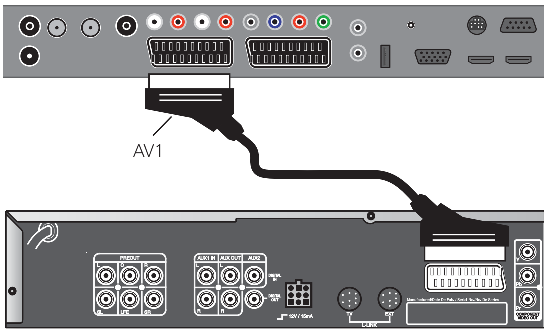
➠ DVD player is registered with the connection wizard.

Switch off all equipment before connecting.

Connect the Euro-AV output of the DVD player to the **AV1** socket of the TV set.

Use a fully equipped Euro-AV cable (available from your dealer) for this.

Connection example of a DVD player



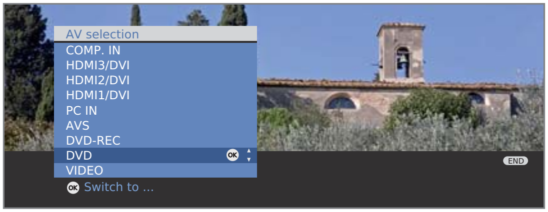
Playback from AV device

If the device supports Digital Link Plus on **AV1/2** or if **Immediate playback → yes** was selected in the connection wizard, the TV set switches automatically to the appropriate AV input after switching on the AV device

The AV input can also be called manually, however.



Call **AV selection**.





▲ ▼ Select **DVD**,
OK switch over.

Start playback on the connected device.

Operating additional equipment

Connecting a DVD recorder to the TV set

➠ DVD recorder is registered with the connection wizard.

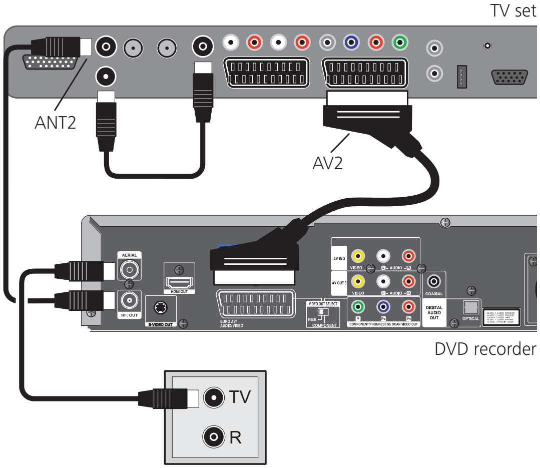
Switch off all equipment before connecting.

Connect the Euro-AV output of the DVD recorder to the **AV2** socket of the TV set.

Use a fully equipped Euro-AV cable (available from your dealer) for this.

If you want to receive and record analogue stations with the receiver (tuner) built into the recorder, the recorder must be looped into the aerial cable. Connect the DVD recorder as shown in the connection example below.

Connection example of a DVD recorder

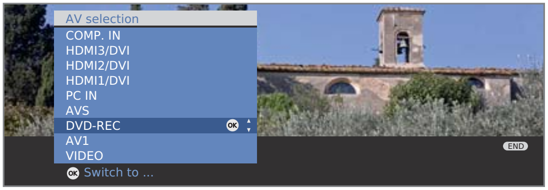


➠ If you want to record DVB stations with an external recorder, the internal receiver of the TV set must be used (see “Timer recording with external devices” on page 59).

Playback from AV device



Call **AV selection**.





▲ ▼ Select **DVD-REC**,
OK switch over.

Start playback on the connected device.

Connecting Camcorder/camera

➠ Camcorder/camera is registered with the connection wizard.

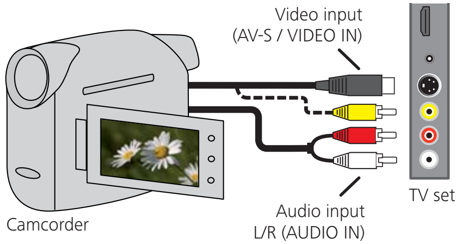
Switch off all equipment before connecting.

Connect the AV output of the camcorder to the audio input sockets L/R (white/red) and the S-VHS connection of the AVS sockets of the TV set.

Use the AV cable enclosed with the camcorder for this.

Some camcorders only supply an FBAS signal instead of an S-VHS signal at the AV output. In this case use the AVS video input (yellow).

Connection example of a camcorder

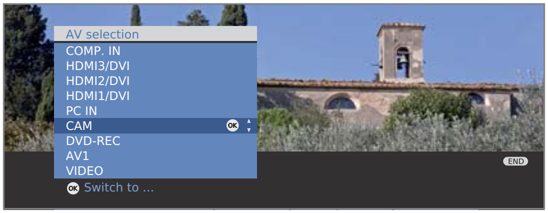


If your camcorder has an HDMI output you can also connect the device to the **HDMI 3** socket on the side (see connections on pages 5 to 7). In this case the camera does not have to be logged into the connection wizard.

Playback from AV device



Call **AV selection**.





▲ ▼ Select **CAM** or **HDMI3/DVI**,
OK switch over.

Start playback on the connected device.

Operating additional equipment

Devices to the HDMI (DVI) connections

The HDMI connections (High Definition Multimedia Interface) allow the transmission of digital video and audio signals from a player, e.g. DVD player, DVD recorder, Blu-ray player, game console or Set-Top-Box via a single cable.

The digital video and audio data are transmitted without data compression digitally and therefore lose none of their quality.

A maximum of five devices can be connected in cascade to every HDMI socket. The devices are arranged in the AV menu and in the station list below the appropriate HDMI socket. If the respective device sends its own device name, this appears in place of the connection name.

Your TV set shows 24p films (see glossary on page 75) which are output by a player connected via HDMI, e.g. Loewe BluTech Vision, automatically in the original 24p format.

Film quality improvement (DMM) must be set to **on** (see page 24).

Digital video signals from a DVI player can be also be reproduced by the HDMI connection using a DVI/HDMI adapter cable. The sound must be piped in additionally.

HDMI and DVI both use the same copy protection method HDCP.

Connecting the device

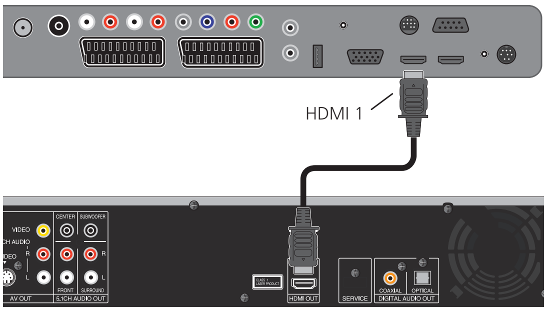
➠ It is not necessary to register HDMI devices with the connection wizard.

Switch off all equipment before connecting.

Connect the device by an HDMI cable (type A, 19-wire) to one of the three **HDMI/DVI** sockets of the TV set.

Connection example of a Blu-ray player

TV set



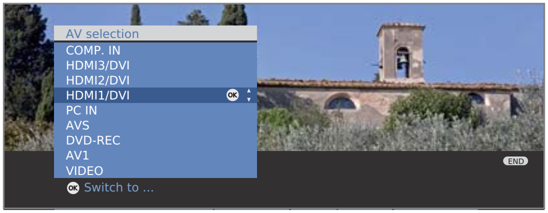
Blu-ray player

If a DVI/HDMI adapter cable is used, the corresponding sound can be piped through the **AUDIO IN1** (analogue) or **AUDIO DIGITAL IN** (digital) socket on the TV set (see also page 56).

Playback from the device



Call **AV selection**.





▲ ▼ Select **HDMI/DVI** socket.
With Digital Link HD-capable devices the device name may possibly appear in place of the connection name.

OK Switch over.

Start playback on the connected HDMI device. The best possible format for the picture is detected and set automatically.

Operating additional equipment

Concealed installation of HDMI devices

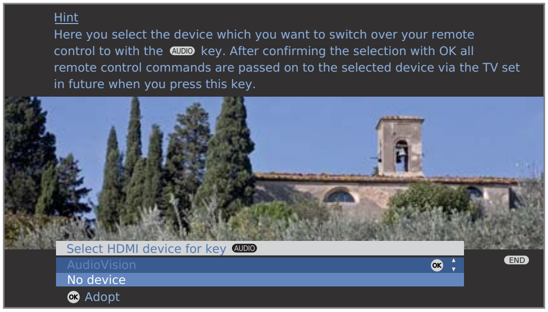
Digital Link HD (HDMI CEC)

The Digital Link HD (HDMI CEC) system operation allows Loewe television sets to transmit the remote control signals via the HDMI connection of a TV set to compatible HDMI devices, such as e.g. Loewe AudioVision. You can therefore set up a concealed CEC capable HDMI device.
For this, first assign the HDMI CEC function with Code **22** to the required device button (**REC**, **DVD** or **AUDIO**) as described on page 66.
Now assign the Digital Link HD function to the used HDMI device.

➠ The CEC capable HDMI device is connected to one of the HDMI sockets of the TV set and switched on.

REC DVD AUDIO Press required button for 5 seconds.

A selection menu appears on the TV set.





▲ ▼ Select required device from the list.

OK Adopt.

From now on, the commands of the remote control are communicated from the TV set to the HDMI device, if the corresponding device button (**REC**, **DVD** or **AUDIO**) has been pressed previously.

Remote TV switch on via Digital Link HD

In the **TV menu** under **Connections → Miscellaneous → Remote TV switch on via Digital Link HD**, you can select whether the TV set is to switch on automatically from standby mode when a disc is played or a screen menu displayed on connected CEC-capable HDMI equipment.

Operating additional equipment

Devices to the PC IN connection

You can connect a PC to the **PC IN** socket for example and thus use the TV screen as a monitor.

➠ When connecting a PC or accessory equipment to the PC IN socket of the TV set, set one of the following screen resolutions on the PC / accessory equipment first.

800 x 600	**60 Hz**	(SVGA)	**1024 x 768**	**60 Hz**	(XGA)
1280 x 1024	**60 Hz**	(SXGA)	**1360 x 768**	**60 Hz**	(WXGA)
720 x 576i		(SDTV)	**720 x 480i**		(SDTV)
720 x 576p		(SDTV)	**720 x 480p**		(SDTV)
1280 x 720p		(HDTV)	**1920 x 1080i**		(HDTV)

Connecting the device

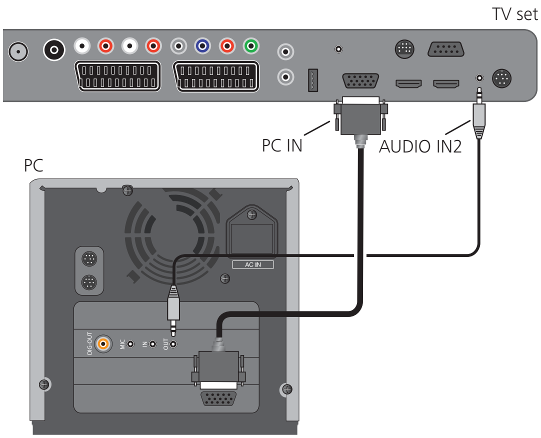
➠ There is no need to register the device with the connection wizard.

Switch off all equipment before connecting.

Connect the device to the TV set's **PC IN** socket with a VGA cable.

Connect the analogue audio signal of the PC to the **AUDIO IN2** jack on the TV set with a stereo cable.

Connection example of a computer

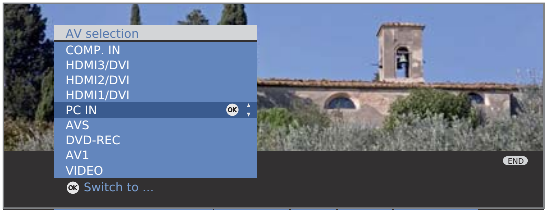


Alternatively, connect the digital audio output of the PC or accessory equipment to the **AUDIO DIGITAL IN** socket of the TV set with a cinch cable.

The digital audio input can be assigned to the PC IN socket by **TV menu** → **Connections** → **Miscellaneous** → **Assign digital audio input**, see page 56.

Playback from the device

Call **AV selection**.



▲ ▼ Select **PC IN** socket,
OK switch over.

Adapt geometry (only possible with certain signals)

This can be used to position the picture correctly and move the position of the picture (horizontally and vertically) so that it fills out the whole screen.

Call **TV menu**.

◀ ▶ Select **Geometry**,
▼ go to the menu line below.

◀ ▶ Select the desired setting,
▼ go to the menu line below.

◀ ▶ Make settings.

Set colour standard (only possible with certain signals)

Call **TV menu**.

◀ ▶ Select **Picture**,
▼ go to the menu line below.
◀ ▶ Select and set **Colour standard**:
RGB or
Ycc / **Ypp**

The colours will not be shown correctly if the wrong standard is set.

Devices to the Component IN connection

DVD players/recorders or a Set-Top-Box with Component Video connections can also be connected to the **Cb/Pb Cr/Pr Y** sockets (**SD/HD-COMPONENT**) of the TV set instead of to the EURO-AV sockets.

The connecting cable with three cinch plugs each transfers the picture information with a better quality than a EURO-AV cable. You need another cable for the sound transmission.

Connecting the device

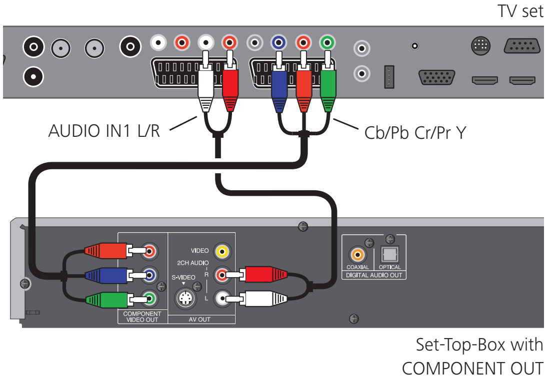
➠ Device to COMP. IN is registered with the connection wizard.

Switch off all equipment before connecting.

Connect the Component Video outputs of the external device by a triple cinch cable to the **Cb/Pb Cr/Pr Y** sockets of the TV set.

Connect the analogue audio outputs of the external device to the **AUDIO IN1 L/R** sockets of the TV set by a dual cinch cable.

Connection example of a Set-Top-Box



Alternatively, connect the digital audio output of the external device to the **AUDIO DIGITAL IN** socket of the TV set with a cinch cable.

The digital audio input can be assigned to the COMP. IN socket by **TV menu → Connections → Miscellaneous → Assign digital audio input**, see page 56.

Playback from the device



Call **AV selection**.





▲ ▼ Select **COMP. IN** socket,
OK switch over.

Adapt geometry (only possible with certain signals)

This can be used to position the picture correctly and move the position of the picture (horizontally and vertically) so that it fills out the whole screen.



Call **TV menu**.



◀ ▶ Select **Geometry**,
▼ go to the menu line below.

◀ ▶ Select the desired setting,
▼ go to the menu line below.

◀ ▶ Make settings.

Sound components wizard

The sound components wizard helps you to configure the components used to play the TV sound.
The TV speakers alone or with active subwoofer, active speakers, analogue or digital HiFi/AV amplifier or the Loewe Individual Sound Projector can be configured depending on what you want to use.
The sound components wizard is preset to playback via TV speakers at the factory.
If a Loewe Preceiver Auro with link cable has been connected to the TV set, you can only select between **TV speakers** and **Auro** in the sound components wizard.

Upgradable Audio AC3/dts decoder
Your TV set may be equipped with an integrated Dolby Digital decoder. This system has been introduced to the DVD video range and digital TV stations can also broadcast in digital multi-channel sound.

For playback of 5 audio channels the surround sound is reinforced by the deepest frequencies from the subwoofer channel (SUB), (5.1 reproduction = 5 audio channels and 1 subwoofer). All 5 audio channels are reproduced with the full frequency range from 20- 20,000 hertz and generate the original theatre effect.

The upgrade kit decodes Dolby Digital, dts and MPEG. Stereo signals can also be reproduced on multi-channel via Dolby Pro Logic and Dolby Pro Logic II. This is regardless of whether the signal is transmitted by an external device or received by the TV set.

Equipment / upgrade of the different set variants and accessories see pages 72 and 73.

Play sound via active speakers

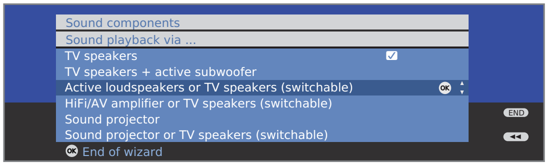
Connect your active speakers to the audio outputs **AUDIO OUT L/R** of the TV set with cinch cables.
Switch the TV set to playback via active speakers.

MENU Call **TV menu**.

◄ ► Select **Connections**,
▼ go to the menu line below.

◄ ► Select **Sound components**.
OK calls the sound components wizard.

▼ ▲ Select **Active loudspeakers or TV speakers (switchable)**.



OK Exit wizard.

Play sound via TV speakers and active subwoofer

Connect your active subwoofer to one of the audio outputs **AUDIO OUT L/R** with cinch cables.
Set the TV set to playback via TV speakers and an active subwoofer.

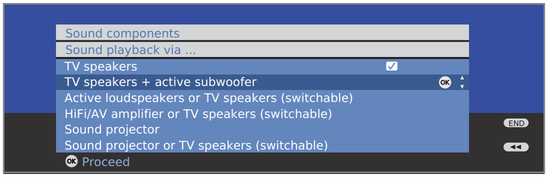
MENU Call **TV menu**.

◄ ► Select **Connections**,
▼ go to the menu line below.

◄ ► Select **Sound components**.

OK calls the sound components wizard.

▼ ▲ Select **TV speakers + active subwoofer**.



OK Continue to the settings for the subwoofer.

Explanations of the setting options:

Adjust subwoofer level	Adapt the volume of the subwoofer to the volume of the TV speakers.
Specify crossover frequency	Set the transfer frequency of the subwoofer so that it corresponds to the lower limit frequency of the TV speakers. 90 Hz in this device.
Subwoofer phase	Switch to a station with music or start playback with music on a DVD player with **P+/P–**. Test both values (**0°** and **180°**) with ◄ ► and select the one where you get a clearer bass reproduction.

Operating additional equipment

Connecting audio amplifiers

The sound component wizard permits configuration of different audio amplifiers (stereo amplifiers, surround amplifiers, analogue or digital) with different digital audio formats (Dolby Digital, dts, MPEG, and stereo/PCM). See the operating manual for the audio amplifier for more information.



Call **TV menu**.

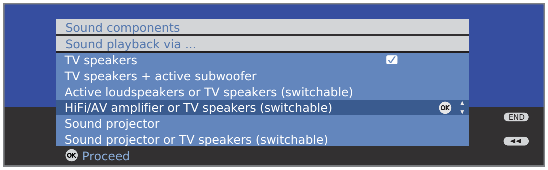


◀ ▶ Select **Connections**,
▼ go to the menu line below.

◀ ▶ Select **Sound components**.

OK calls the sound components wizard.

▼ ▲ Mark the **HiFi/AV amplifier or TV speakers (switchable)**.



OK **Proceed**.

◀ ▶ Select whether the sound is to be transmitted digitally or analogue to the the amplifier.

Continue, depending on the amplifier, see right column.

Explanations of the setting possibilities:

HiFi/AV amplifier or TV speakers (switchable)
: Select appropriate setting to connect an amplifier. After a HiFi/AV amplifier is registered in the sound menu, the sound can be piped either through the amplifier or through the TV speakers, according to **Sound via...** selection.

Sound formats
: Specify sound formats which can be decoded with the digital amplifier (see operating manual of the used amplifier).

Type of amplifier
: Select either stereo or surround amplifier.

TV loudsp. as centre speaker
: For every connected surround amplifier, select whether the TV speakers are to be used as centre speakers.
If so, make a connection between the centre output of the amplifier and the centre input of the TV set **AUDIO IN1 C** with a cinch cable.

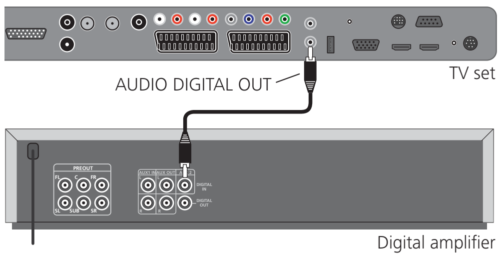
<u>Attention</u>: Do not use the centre speaker connection of the amplifier, use the centre pre-amp output instead!

Connecting digital audio amplifiers

Continuation of the left column above ...

For digital audio transmission: Select **yes**.

Connect the digital audio output of the TV set **AUDIO DIGITAL OUT** with the digital audio input of the amplifier via a cinch cable:



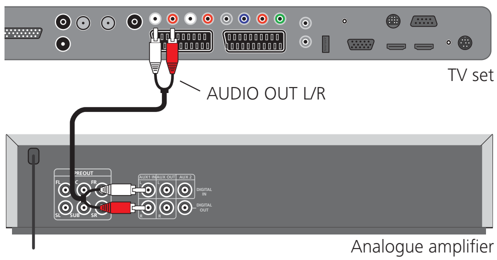
Set sound formats, amplifier type and other settings, see explanations of the setting possibilities (left hand column).

Connecting analogue audio amplifiers

Continuation of the left column above ...

For digital audio transmission: Select **no**.

Connect the analogue audio output of the TV device **AUDIO OUT L/R** via a stereo cinch cable to the analogue audio input of the amplifier:



Select amplifier type and other settings, see explanations of the setting possibilities (left hand column).

Operating additional equipment

Assignment of the digital audio input

In order to be able to hear the digital sound of an external device connected to an AV input, an AV input can be assigned to the digital audio input socket **AUDIO DIGITAL IN**. When switching to this AV input, the digital audio signal applied to the **AUDIO DIGITAL IN** input is passed on to the upgradable integrated Dolby Digital decoder and the digital audio output socket **AUDIO DIGITAL OUT**. You will then hear the digital sound of the assigned AV input instead of the analogue sound if available.

Connecting devices to the digital audio input

For the digital audio playback from an external device, e.g. the DVD player, you have to feed the digital audio signal to the TV set.
The external digital audio signal can be played back via the upgradable Dolby Digital decoder in the TV set, via an externally connected digital audio amplifier, Loewe Individual Sound Projector or Loewe Auro.

➠ An external audio amplifier or Loewe Individual Sound Projector must already be set in the sound components wizard (see page 55).



Call **TV menu**.

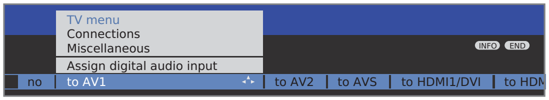


◀ ▶ Select **Connections**,
▼ go to the menu line below.

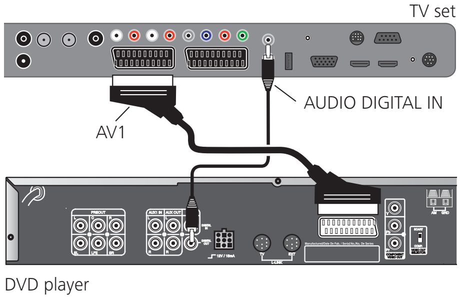
◀ ▶ Select **Miscellaneous**,
▼ go to the menu line below.

◀ ▶ Select **Assign digital audio input**,
▼ go to the menu line below.

◀ ▶ Select **AV input**.



To connect a DVD player to the digital audio input of the TV set for example, connect the digital output socket of the DVD player (DIGITAL OUT) via a cinch cable to the **AUDIO DIGITAL IN** socket on the TV set.



If new devices are connected and registered in the connection wizard, the digital audio input **AUDIO DIGITAL IN** is assigned in the connection wizard (see page 47).

Audio connection in HDMI (DVI) devices

External devices with DVI connection

If an external device with DVI interface is connected by an HDMI/DVI adapter to one of the **HDMI/DVI** sockets of the TV set, you can connect the digital sound of the external device to the digital audio input socket **AUDIO DIGITAL IN**.
The assignment of the digital audio input to the corresponding HDMI socket of the TV set takes place as described in the column on the left.

If you want to use the analogue sound of the external device, connect this to the **AUDIO IN1** socket.

External devices with HDMI connection

If external devices with HDMI interface are connected to one of the **HDMI/DVI** sockets of the TV set, no assignment of the audio input is necessary because in HDMI the picture and sound are transmitted digitally via one connection.

RS-232C interface (upgradable interface)

You can connect either the Loewe Individual Sound Projector or a home network system of different manufacturers (e.g. AMX, Crestron) to your TV set via the upgradable RS-232C interface.

For the configuration of the RS-232C interface and further information about the different home networking systems, please contact your dealer.

The direct way to record

You can programme timer recordings for Digital Recorder or connected recorders available according to the equipment on the TV set. The recording wizard is integrated at several places for programming a recording. You will find further information about recording with Digital Recorder in a separate user guide.

Programming a timer recording with the EPG

➠ You are in EPG mode; if not, press the **EPG button**.



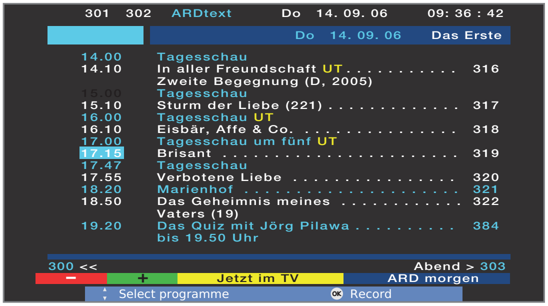
▼ ▲ Mark the desired broadcast.

RECORD button: Call **Timer data**.

Change or confirm **Timer data** as necessary.

Programming a timer recording via teletext

➠ You are in teletext mode; if not, press the **TEXT button**.



RECORD button: Call the programme pages of the current station. Change preset page numbers, see page 37.

Green button: Go to the appropriate page.

▼ ▲ Select desired broadcast,

OK calls **Timer data**.

Change or confirm **Timer data** as necessary.

Enter timer data

Timer data are displayed after selecting the broadcast you want to record. You can change these before confirming.



OK confirms **Timer data**, or change if necessary:

◀ ▶ Select **Recorder**.

▲ ▼ Select **Date**.
Enter the recording date with the **numeric buttons**.

▲ ▼ Select **Recording time**.
Enter the recording time with the **numeric buttons**.

▲ ▼ Select **VPS**.
◀ ▶ Set **yes/no**.

▲ ▼ Select **Recording type**.
◀ ▶ Set **once only**, **Mon-Fri, daily, weekly**.

OK Confirm the **Timer data**.

Setting possibilities in the Timer data menu:

Recorder	Selection of the connected/integrated recorder.
Date	Day of recording.
Recording time	Time of recording.
VPS	Use VPS data for analogue stations, **yes / no**. (only available for some analogue stations)
Auto time control	Use automatic time control, **yes / no**. (only available for some DVB stations and when recording via EPG)
Recording type	**once**, **Mon–Fri**, **daily** or **weekly**. ➠ In devices with Digital Recorder and DR recordings by EPG **Serial** can be selected additionally (see also the instruction manual of the Digital Recorder). ➠ When the automatic time control is activated only **once only** can be selected.

➠ If you use an external recorder without Digital Link Plus, you have to select the recording source (e.g. AUX) in the recorder. This is also the case when DVB broadcasts are to be recorded. The TV's receiver is used.

➠ When you use an external recorder with Digital Link Plus or a comparable system (e.g. P50), this is controlled automatically.

Programming the timer with the timer overview

All programmed recordings, marked programmes and copy orders [1] are listed in the timer overview. You can also programme new recordings, mark other programmes and copy [1] pre-recorded programmes from the DR archive to an external recorder with the timer overview.

Call **Timer list**.



Red button:	New entry (see right hand column).
Green button:	Change recording.
Yellow button:	Delete recording.
Blue button:	Delete memo.

Explanation of the symbols in the timer list:

- Record
- Repeated recording (daily, weekly or Mon-Fri)
- Serial recording [1]
- Decoding order (later decoding of an encrypted recorded programme [1])
- Marked programme (see page 34)

[1] only in sets with Digital Recorder

New entry: Programme timer recording manually

➠ Timer list is opened.

Red button: Call **New timer entry**.



Select **Recording**,
OK call.



Select **Manual**.
For programming a timer recording **Via EPG** or **Via Teletext** see page 57.

OK Call **Station selection**.

Select station.
OK Call **Timer data**.

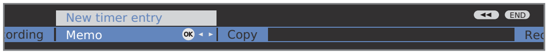
Entry of the timer data see page 57.

After confirming the timer data the new recording is transferred to the timer overview.

New entry: Memorize programme using the timer overview

➠ Timer list is opened.

Red button: Call **New timer entry**.



Select **Memo**.
OK EPG is opened.

Note desired programme as described in **Switching and memorizing with the programme list** (Seite 34).

New entry: Copying DR archive entries to DVD [1]

➠ Timer list is opened.
➠ An external recorder is registered.

Red button: Call **New timer entry**.



Select **Copy**.
OK The DR archive is opened.

See the chapter **Copying recordings from the archive** in the operating instructions of the Digital Recorder for further steps.

Operating additional equipment

Timer recording with external devices

➠ It is not possible to record HDTV broadcasts with external devices. Use the internal Digital Recorder for this if it is installed.

Recorder with Digital Link Plus

If you use an externally connected recorder with Digital Link Plus or a similar system, the TV set and connected recorder exchange data (e.g. compare station lists TV set/recorder or timer data of analogue stations). Please consult the operating manual of your recorder to find out of your recorder is Digital Link Plus compatible. In addition use only Euro-AV cables for the connection between TV set and recorder.

Analogue stations

The timer data are transmitted automatically from the TV set to the recorder after programming is complete. (For DVD recorders in addition the recording quality SQ or EQ is also transmitted.)
The recording is then controlled by the recorder and the recorder tuner is used for reception of the programme.
The recording data are not saved in the timer overview of the TV set. Consequently if you want to change or delete the timer data then you must do so on the recorder.

Digital stations

If you want to record digital stations with an externally connected recorder, then the DVB tuner is used and the TV device takes over control of the recorder. Then the station on the TV set is locked during the timer recording. It is not possible to switch over to another DVB station.

Recorder without Digital Link Plus

If the programmed timer cannot be transmitted to the external recorder (no Digital Link Plus) but supports Digital Link (Loewe-own system), the TV receiver is always used.
Digital Link must be switched on on the recorder. Read the operating instructions of your Loewe recorder.
In addition use only fully wired Euro AV cables for the connection between TV set and recorder.

Analogue and digital stations

You can control the recording from the TV set. The recorder must be set manually to the AV input, to which the TV device is connected. The station on the TV set is locked during the timer recording. It is not possible to switch over to another station.

Copy protection

Copy-protected programmes will not be output on the EURO AV sockets for legal reasons.

PhotoViewer

You can view photos in the standard JPEG format stored on a USB stick or a memory card in a card reader. You can also collect photos in a slide show.

Connecting

➠ Certain USB memory media may not be supported by this set under some circumstances.

Plug a card reader (via a USB cable) or a USB stick into the USB port on the TV set (see pages 5 to 7).

Use a USB extension cable (see Accessories on page 73) for the USB stick if the USB socket is difficult to access (e.g. wall mounting) or the USB stick is too big to be plugged in.

Starting the PhotoViewer

➠ No photos can be displayed which are available in progressive JPEG format.

A memory card or the USB stick should contain data in standard JPEG format with the file extension ".jpg".

ASSIST Call the **Assist+** menu.

▲ ▼ Mark **PhotoViewer**,
OK continue.

If only one memory medium is available, the **PhotoViewer** is started. You see the first page of the photo overview (see right column).

If several media are available, select with
◀ ▶ memory medium and then with
OK start **PhotoViewer**.

Ending the PhotoViewer

Remove used memory medium.

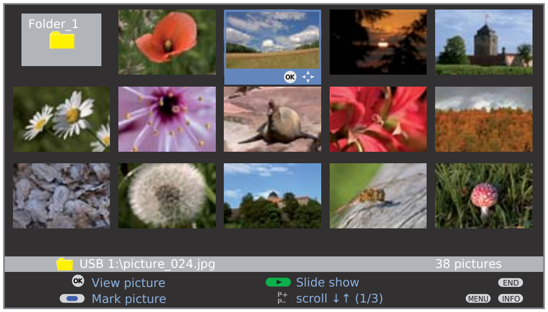
Or:
END Press **END button** (when photo list is displayed).

Or:
TV Press **TV button**.

Or:
ASSIST Press the **ASSIST button** and call another function in the Assist+ menu.

Viewing photos

➠ The photo overview is displayed.



▲ ▼ ◀ ▶ Mark a photo, page with **P+/P–** if necessary.
OK Display as full picture.



⏩ or **P+** Next photo.

⏪ or **P–** Previous photo.

END: Show/hide photo information.

Yellow button: Zoom photo.
Enlargement factors x2, x4, and x8 are possible.
Press the key several times.
At the 4th press return to original size.

Select photo section in zoom mode with ▲ ▼ ◀ ▶.
Exit the zoom mode to the photo overview with **OK** or the **STOP button**.

◀ ▶ Rotate picture by 90 degrees to the left/right.

➠ Photos shown in a slide show can only be turned to view in the pause mode.

OK or **STOP button:** Back to the photo overview.

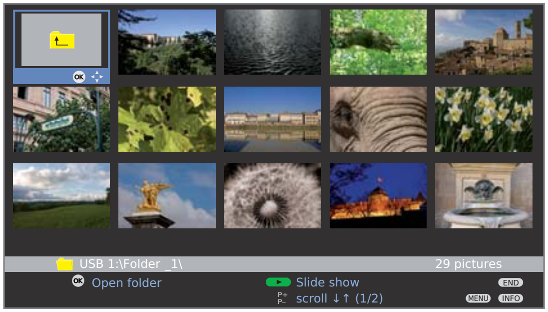
Open folder

➠ Folders will only be displayed if they were created on the memory card / USB stick.

▲ ▼ ◀ ▶ Mark a folder in the photo overview.

OK Open folder.

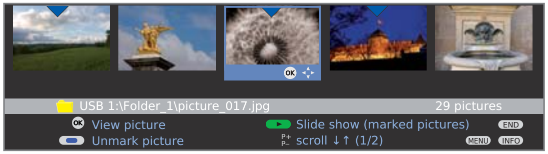
The photos in this folder are displayed.



Marking photos for slide show

Mark the photos that you want to display in a slide show.

▲ ▶ ▼ ◀ Navigate to a photo.



Blue button: Mark photo for slide show.

Start slide show

➠ No pictures are marked: All photos of the folder that was just opened will be displayed.

➠ Photos marked: Only marked photos will be displayed.

PLAY button: Start / continue slide show.

OK calls the photo overview.

PAUSE button: Pause / continue the slide show.

Yellow button: Zoom picture (only in pause mode).

◀ ▶ Rotate picture to left/right in 90° steps (only in Pause mode).

⏩ or **P+** Next photo.

⏪ or **P–** Previous photo.

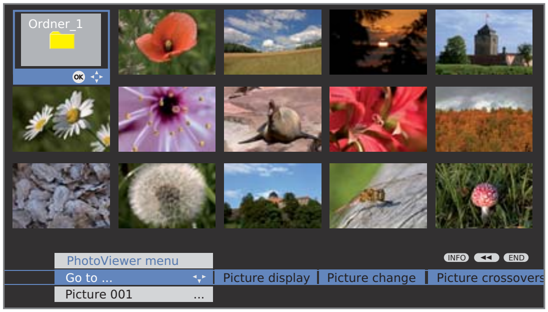
STOP button: End slide show.

Calling the PhotoViewer menu

In the PhotoViewer menu you can make picture settings and select the memory medium.

➠ The photo overview is displayed.

MENU Call **PhotoViewer menu**.



Explanations of the setting possibilities:

Go to...	Within the folder select a photo directly or go to the beginning or end of the folder.
Picture display	With **Optimum size** the photo is reduced or enlarged in size so that the screen is optimally filled. With **Original resolution** each pixel of the photo represents one pixel on the screen. If the photo resolution is higher than that of the screen, then portions of the photo will be cropped.
Picture change	Set the display time per photo in a slide show to between 3 and 60 seconds. The loading time of the photo depends on the photo size, the number of saved files and the transmission speed of the memory medium. Therefore a photo change may take longer than specified.
Picture crossovers	There is a choice of four different photo transitions for changing slides. You can also have the photo transitions run in sequence.
Photo info	Display additional information about the picture: Recording time and date, resolution and picture size.
Picture settings	The settings correspond to the picture settings in TV mode (see page 24).
Sound	Select whether or not the previously heard sound is to be heard during the PhotoViewer operation.
Select memory medium	Select memory medium from which the photos are to be reproduced. This menu item is only displayed if at least two memory media are available.

Operating additional equipment

MusicBox

You can play music files in MP3 or WMA format which are saved on a USB stick or a memory card in a card reader. You can also collect the music titles in play lists.

Connection

➠ Certain USB memory media may not be supported by this device.

➠ Your memory medium should not exceed a total capacity of 8 GB. Larger memory media may not be supported. The read-in time of the memory medium depends on the stored data volume.

➠ The file names must have the extension ".mp3" or ".wma". Alternative specifications such as MP3 Surround or similar are not supported.

Plug a card reader (with a USB cable) or a USB stick into the USB port on the TV set (see pages 5 to 7).

Starting the MusicBox

ASSIST Call **Assist+** menu.

▲ ▼ Mark **MusicBox**,
OK continue.

If there is only one memory medium the **MusicBox** is started with the **MusicBox list** (see right column).
If several media are available select memory medium with

◀ ▶ and then with
OK start **MusicBox**.

Ending the MusicBox

Remove used memory medium.

Or:
END Press **END button** (while status window is displayed)

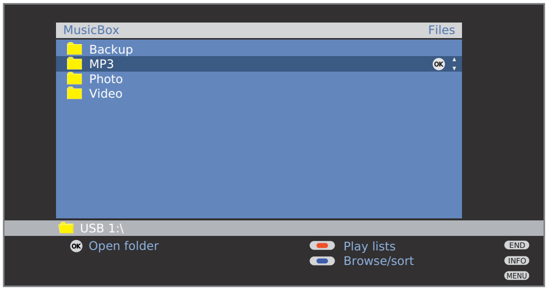
Or:
TV Press **TV button**.

Or:
ASSIST Press the **ASSIST button** and call another function in the Assist+ menu.

➠ If the MusicBox is ended during playback, the MusicBox remembers the appropriate place in the title. If the TV set is not switched off or the memory medium removed in the meantime, the playback continues at this point the next time the MusicBox is called. The MusicBox then starts immediately on the **MusicBox status window** (see right column).

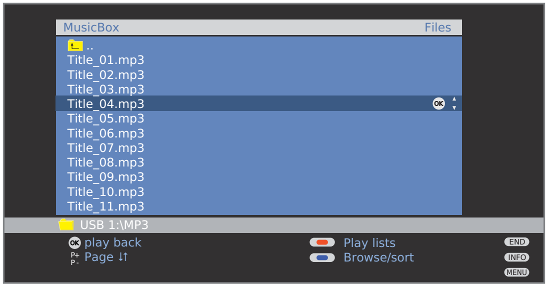
Select/play music

After starting the MusicBox, the content of the memory medium, the **MusicBox list**, is displayed.



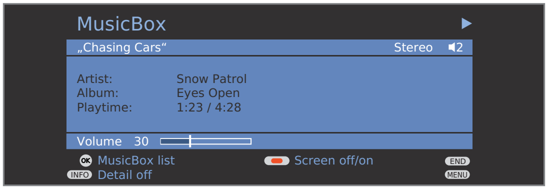
▲ ▼ Mark folder, scroll with **P+/P-** if necessary,
OK open selected folder.
You see the music files (titles) and/or sub-folders in the opened folder.

One folder level back:
Select ... and press **OK**.



▲ ▼ Mark title, scroll with **P+/P-** if necessary,
OK play marked title.
Then the **MusicBox status window** opens with information about the played title.

➠ If the file contains additional information (ID3 tags), the title, singer, album title etc. are displayed.



Functions of the control buttons

➠ Title is played.
➠ Fast forward and rewind is no possible with WMA files.

STOP button: Once: resume stop, twice: stop.

PLAY button:
After resume stop: Continue playing at place where playback was interrupted.
After stop: Start playing the first title according to the set sorting.
For playback: Start the current title from the beginning.
For pause: Continue playback.

PAUSE button: Pause / continue playback.

⏩ Short: next title, long: wind.

⏪ Short: previous title, long: rewind.

Settings in the MusicBox status window

Red button: Switch off TV screen.
Press **red button**, **INFO** or **OK** to switch back on.

INFO Reduce info window to one line / maximise again.



OK Show MusicBox list.

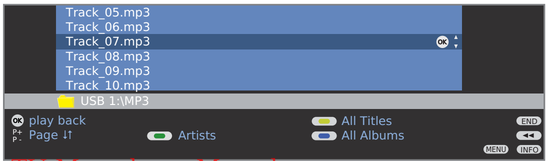
MusicBox – Browse/sort

You can browse or sort the contents of your memory medium with the coloured buttons according to certain criteria (file names, titles, artists, albums).

➠ The MusicBox list is displayed.

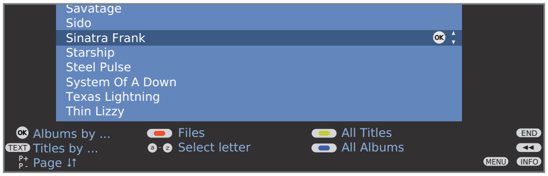
Blue button: Call **Browse/sort**.
The MusicBox overview is sorted according to **Files** at the beginning. The sorting is based on the file names of the music files regardless of their ID3 tags.

▲▼ Select file/folder and play/open with **OK**.



Sort according to artists

Green button: Show **Artists**.
All music titles are sorted alphabetically according to artists (ID3 tags).



▲▼ Mark artist, scroll with **P+/P-** if necessary or enter the initial letter with **numeric buttons** like a mobile phone keypad (see page 16).

OK Call **Albums by ...**.
The albums of the selected artist are displayed sorted alphabetically.
▲▼ Mark album and select with **OK**.
▲▼ Select title in album and play with **OK** in MusicBox status window.

TEXT: Call **Titles by ...**.
The titles of the selected artist are displayed sorted alphabetically.
▲▼ Select title and play with **OK** in MusicBox status window.

Sorting according to titles

Yellow button: Show **All Titles**.
All available titles are sorted alphabetically by ID3 tags and displayed with the appropriate artist.
▲▼ Select title and play with **OK** in MusicBox status window.

Sorting according to albums

Blue button: Show **All Albums**.
All available albums are sorted alphabetically by ID3 tags and displayed with the appropriate artist.
▲▼ Mark album and select with **OK**.
▲▼ Select title in album and play with **OK** in MusicBox status window.

Sorting according to files

Red button: Show **file overview**.

Exit sorting

Exit search/sorting. The new sorting is retained in the MusicBox list.

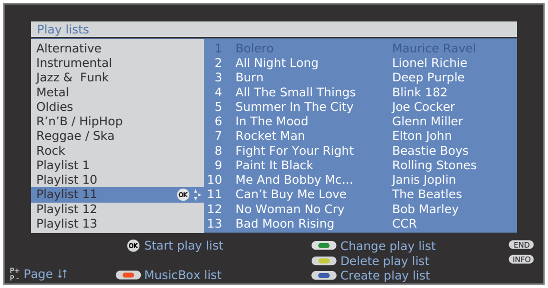
MusicBox – Play lists

You can save and call your music titles in play lists. Change and create play lists as you like.
The play lists are created on the memory medium in the common M3U format for simple exchange with the PC.

Call / play play list

➠ The MusicBox list is displayed.

Red button: Call **Play lists**.



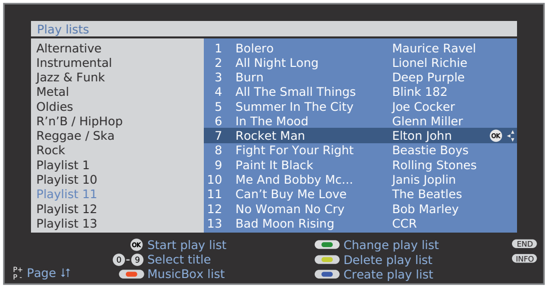
In the play list overview you see the created play lists on the left hand side of the dialogue. On the right next to it you see the music files in the marked play list.

▲ ▼ Select play list, scroll with **P+/P-** if necessary.

OK The play list is played in the MusicBox status window starting with the first title. The name of the play list is displayed after the title.

OK The play list is displayed again.

► Change from list selection to title selection.



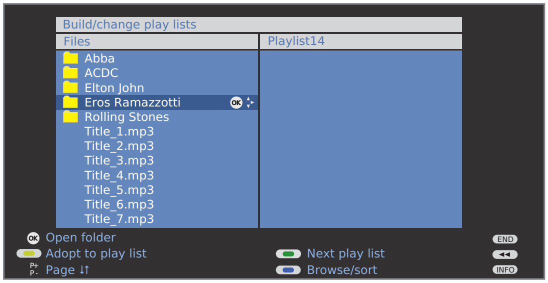
▲ ▼ Select title, scroll with **P+/P-** if necessary,

OK the play list is played in the MusicBox status window from the marked title.

Create new play list / add title

➠ The play list overview is displayed.
➠ List selection (left column) must be selected.
If not, change the column with ◄ .

Blue button: Call **Create play list**.
A new empty play list is created. The file selection is visible on the left.



▲ ▼ Mark title/folder, scroll with **P+/P-** if necessary,

OK **Adopt** marked title **to play list** or **open** marked **folder.**

Yellow button: Adopt marked folder **to play list**.

Change play lists

You can adapt the play lists as required. It is possible to move the titles in the play lists or remove them from the list. The play list can be renamed or deleted completely.

➠ The play list overview is displayed.

Green button: Call **Change play list**.

► Go to the page of the play list (right column).



Green button: Select play list to be changed.

Operating additional equipment

Rename play lists

➠ Play list (right column) must be selected. If not, change column with ▸ .

Blue button: Starts **Rename play list**.

Numeric buttons: Enter new name (same procedure as for rename station, see page 30).

OK Save new name.

Move titles in the play lists / change order

➠ Play list (right column) must be selected.

▴ ▾ Mark title to be moved.

Yellow button: Starts **Move title**.

▴ ▾ Select insertion position at which the marked title is to be inserted.

OK Move title.

Remove titles from play lists / clear play list

➠ Play list (right column) must be selected.

▴ ▾ Mark title to be deleted.

OK Remove marked title from play list.

Or:

Red button: Starts **Clear play list**.

OK Confirm clearing play list.

Delete play list from memory medium

➠ The play list overview is displayed.

▴ ▾ Mark play list to be deleted.

Yellow button: Starts **Delete play list**.

OK Confirm delete play list.

Exit play list overview

➠ The play list overview is displayed.

Red button: Call **MusicBox list**.

Or:

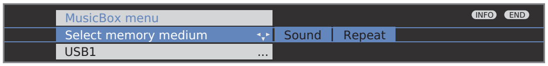
END: Call MusicBox status window.

MusicBox – Menu

In the MusicBox menu you make sound settings, can select the memory medium and set the repeat mode.

➠ MusicBox must be activated.

MENU Call **MusicBox menu**.



Explanations of the setting options:

Select memory medium – Select memory medium from which the audio files are to be used. This menu item is only displayed if at least two memory media are available.

Picture settings – The settings correspond to the picture settings in TV mode (see page 24).

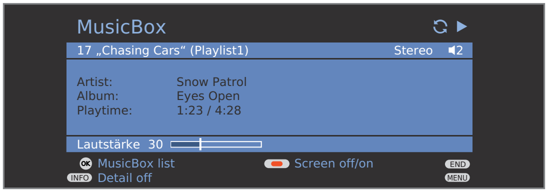
Sound settings – The settings correspond to the sound settings in TV mode (see page 22).

Repeat – Titles can be repeated in two ways:

Title ↻**:**
Only the played title is repeated.

Folder or **Play list** ↻**:**
Only the titles from the currently selected folder or, if play list is activated, the current list are repeated.

Repeating is endless until the function is switched off in the MusicBox menu.
The appropriate symbols for the repetition are displayed in the top right of the info window.



Operating additional equipment

Operating Loewe equipment

Using the remote control for the TV mode of the TV set

TV Press the **TV button**, the display above it will light for approx. 5 seconds.

Using the remote control for additional equipment

REC DVD AUDIO Press the **REC**, **DVD** or **AUDIO button**, the display above it will light for approx. 5 seconds.

As long as a button is pressed, the display of the selected operating mode lights up (TV – REC – DVD – AUDIO). This allows you to check which operating mode the remote control is set to every time you press a button.

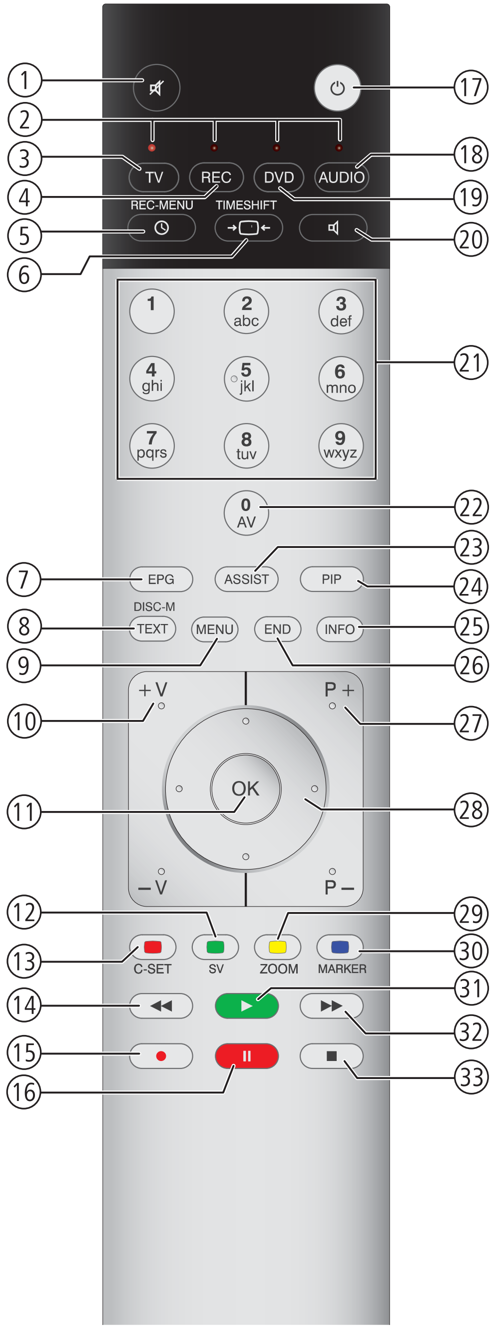
Setting the remote control for other Loewe devices

Press required device button along with the **STOP button** at the same time, until the associated LED display flashes twice. Then enter the two-digit device code from the list.

Device	Code	Factory setting
Loewe ViewVision 8106 H	10	
Loewe Viewvision, Centros 21x2	12	
Loewe ViewVision DR+ DVB-T	**13**	**REC**
Loewe Auro 2216 PS/8116 DT	14	
Loewe BlutechVision	15	
Loewe Soundprojector	17	
Loewe TV - digital radio	**19**	**AUDIO**
Loewe Mediacenter	20	
Loewe BlutechVision Interactive	**21**	**DVD**
HDMI CEC mode	**22**	
Loewe Soundprojector 2	23	
Loewe AudioVision	24	
Resetting to factory setting	99	

The associated LED display flashes twice.

➠ The codes shown here only apply for direct operation of the accessory device. For operation of the accessory device via the TV set, e.g. with concealed installation, see page 51.



Operating additional equipment

Functions for the Loewe DVD player (Auro 2216 PS, 8116 DT)

① Sound off/on
② LED indicator for current operating mode
③ Switch over to operate TV set
④ Switch over to operate Recorder
⑤ Sleep timer
⑥ Set TV picture format; RADIO: Mono/Stereo
⑦ DISC: Repeat; RADIO: display RDS name/frequency of station
⑧ DISC: User interface of loaded DVD
⑨ Show/hide menu; MENU: close window
⑩ **V–/V+** Volume down/up
⑪ DISC: Title/Chapter overview; RADIO: station table
MENU: confirm menu selection
⑫ Green button: Title/Chapter selection
⑬ Red button: DISC: camera position
⑭ DISC: short: beginning of chapter/title previous chapter;
long: search back;
RADIO: short: fine tuning back long: search back
⑮ no function
⑯ Pause; single frame; slow motion
⑰ Switch on/off - on stand by
⑱ short: TV Radio Digital; long: Auro FM/AM-Radio
⑲ Switch over to operate Auro
⑳ Select sound format
㉑ DISC: select chapter/title; RADIO: select stored station;
MENU: enter digits
㉒ MENU: enter numbers or letters
㉓ DISC: Repeat A-B; RADIO: FM/AM-mode
㉔ Select external audio source
㉕ DISC: menu bar
MENU: context help
㉖ DISC: Status display; RADIO: station table
MENU: hide menu
㉗ **P+/P–** DISC: next/previous chapter; RADIO: station forward/back
㉘ ▲ ▼ DISC: chapter up/down; MENU: select up/down;
◀ ▶ DISC: search back/forward; MENU: select left/right
㉙ Yellow button: Zoom
㉚ Blue button: Set marker
㉛ Playback
㉜ DISC: short: next chapter/title; long: search forward
RADIO: short: fine tuning forward; long: search forward
㉝ Stop

Functions for the Loewe DVD recorder (Centros 1202, 2102 HD, ViewVision DR+)

① TV Sound off/on
② LED indicator for current operating mode
③ Switch over to operate TV set
④ Switch over to operate Recorder
⑤ Timer recording menu; timer recording list menu
⑥ STOP: Title List; PLAY: Edit thumbnail;
CARD: Photo-, Music-, Film-Mode
ViewVision DR+: Timeshift Mode
⑦ STOP: Call AV selection (AV1-AV4,DV,TV)
ViewVision DR+: PLAY: skip 15 Sec.
⑧ User interface of loaded DVD
MENU: original / playlist
⑨ Show/hide menu
⑩ **V–/V+** TV Volume down/up
⑪ Status display (TV, DVD)
MENU: confirm the menu selection
⑫ Green button: ShowView menu
⑬ Red button: new chapter marker
⑭ PLAY: press short: Start of current chapter/previous chapter;
press long: search back; PAUSE: press short: slow motion back
⑮ Record
⑯ Pause /single frame
⑰ Switch on/off - on stand by
⑱ TV Radio Digital
⑲ Switch over to operate DVD-Player
⑳ TV Sound menu
㉑ STOP: Select station directly
MENU: enter numbers or letters
㉒ MENU: enter numbers or letters
ViewVision DR+: STOPP: Call AV selection
㉓ Card Reader operation
ViewVision DR+: „Home“ menu
㉔ PIP (picture in picture)
㉕ Info; PLAY: menu bar
㉖ MENU: hide menu
㉗ **P+/P–** PLAY: Next chapter; STOP: Select station up/down
㉘ MENU: select/set
㉙ Yellow button: Zoom
㉚ Blue button: DISC: short: Set marker; long: Marker search
㉛ Playback
㉜ PLAY: Press short: next chapter; Press long: search forward
PAUSE: Press short: slow motion forward
㉝ Stop

Rotating the TV set (upgradable interface)

Your TV set can be upgraded with the connection for a rotating foot control. If the set is assembled with a Loewe stand with motor drive, you can align it to suit your sitting position using the remote control.

➠ A motor unit is connected.
➠ In normal TV mode, without other displays.

◀ ▶ Rotate the TV set.

Do not place any objects in the rotation range of the TV set that could obstruct the rotation or that could be knocked over by the rotation movement.

Setting the range of rotation

You can determine the range of rotation (maximum +/- 40°) of the TV set by setting the maximum right and left stop.

MENU Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Miscellaneous**,
▼ go to the menu line below.

◀ ▶ Select **Rotate TV**,
▼ go to the menu line below.

◀ ▶ Select **Basic adjustment**,
OK calls the basic adjustment.



▶ **Basic adjustment (right)**
Turn your TV set as far to the right as the installation position allows. This will be the maximum right rotation position in future.
OK confirms basic adjustment to right.



◀ **Basic adjustment (left)**
Rotate your TV set as fasr to the left as the installation position allows. This will be the maximum left rotation position in future.
OK ends the basic adjustment.

END Close the menu.

Specifying the switch off position

This is where you specify the position that the TV will take when it is switched off. In order for the TV set to return to the determined switch-off position when switching it off, this must be activated (see below).

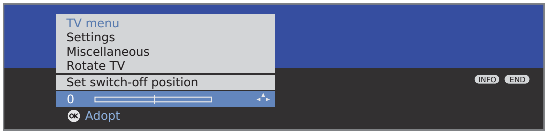
MENU Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Miscellaneous**,
▼ go to the menu line below.

◀ ▶ Select **Rotate TV**,
▼ go to the menu line below.

◀ ▶ Select **Set switch-off position**,
OK calls Set switch-off position.



◀ ▶ Set the desired switch-off position.
The TV set rotates in the process.
OK Save the set position as the switch-off position.

END Close the menu.

Activating the switch-off position

MENU Call **TV menu**.

◀ ▶ Select **Settings**,
▼ go to the menu line below.

◀ ▶ Select **Miscellaneous**,
▼ go to the menu line below.

◀ ▶ Select **Rotate TV**,
▼ go to the menu line below.

◀ ▶ Select **Activate switch-off position**,
▼ go to the menu line below.

◀ ▶ Select **yes**.

END Close the menu.

If the TV set is switched off with the on/off key on the remote control or with the switch integrated in the display then it will turn to the defined siwtch-off position. When it is switched back on, it returns to the position last set.

Troubleshooting

Problem	Possible cause	Remedy
All menus are displayed in the **wrong language**.	The menu language was set incorrectly.	**Set the menu language:** Press the **INFO button in TV mode** (**Index**). Mark the first key word and call it with **OK**. Then select the language and confirm it with **OK**.
In the **TV menu**, **Connections** cannot be called (displayed in grey).	A timer recording is in progress.	Wait until the timer recording ends or delete the timer recording (page 58).
The control functions of the Loewe Recorder and the **Timer** are not working or are not working properly	a) The Digital Link function is not activated or not possible in the recorder. b) EURO-AV cable is not connected. c) Recorder is not logged in.	a) Activate Digital Link in the recorder (see operating instructions of the recorder). b) Connect EURO-AV cable (page 49). c) Register recorder (page 46).
General problems when connecting **external devices** via an **AV input**.	a) The device is not logged in to the **connection wizard** or is connected differently than is shown in the **connection diagram**. b) The **AV standard** is set incorrectly. c) The **signal type** is set incorrectly.	a) In the **connection wizard** (**TV menu → Connections → New devices/modifications**) compare the **connection diagram** with the actual installation and connect as illustrated (page 46). b) Set the correct standard (page 18). c) Set the correct signal type (page 47). If for **AV standard** or **AV signal** is set to **"Automatic"** then this can cause errors to be detected with signals that do not comply with standards. In this case standard and signal must be set according to the information in the operating manual of the external device.
The **connection** of a **decoder** does not function or does not function properly.	a) The signal is not decoded because the correct decoder stations have not been selected in the **connection wizard**. b) In decoder mode the sound is missing because the wrong decoder sound has been assigned in the **connection wizard**.	a) Follow the instructions in the **connection wizard** (**TV menu → Connections → New devices/modifications**) and select the appropriate decoder transmitter (page 46). b) Follow the instructions in the **connection wizard** and select the right audio source (Decoder, TV oder Autom.) (page 46), see also decoder instructions.
Errors occurred when running a CA module.		Switch the TV set off. Remove the CA-module from the TV set. Wait a few seconds. Reinsert the CA-module. Switch the TV set on again.

Troubleshooting

Problem	Possible cause	Remedy
Digital Link Plus does not work.	a) EURO-AV cable is not fully wired (pin 10 not wired). b) Some recorders can only adopt stations during the initial installation of the TV set.	a) Replace the EURO-AV cable. b) Restore the recorder to the as-delivered state (see recorder's operating manual).
With **Teletext** various **character sets** are displayed incorrectly.	The wrong character set has been set in the Teletext menu.	Set the right character set: Select **Teletext menu → Settings → Character set → Standard** or the appropriate character set.
No sound via the external digital **audio amplifier**.	a) The external digital audio amplifier does not support the selected sound format (Dolby Digital, dts, MPEG). b) TV set and external digital audio amplifier are not connected with each other.	a) Set PCM stereo on the DVD player in the sound selection. For DVB stations on the TV set switch to stereo in the **Status display (END) – Language/sound (green button)**. b) Connect **AUDIO DIGITAL OUT** from the TV set to a **digital** input of the external digital audio amplifier and select the appropriate input to this.
The **picture** of a connected external recorder is visible but the **timer** cannot be called.	The device is not registered in the **connection wizard** or is connected differently to shown in the **connection diagram**.	In the **connection wizard** (**TV menu → Connections → New devices/modifications**) compare the **connection diagram** with the actual installation and connect as illustrated (page 46).
The **picture** of a connected external recorder is visible but the error message **no recorder available** is still output.	The device is not registered in the **connection wizard** or is connected differently to shown in the **connection diagram**.	In the **connection wizard** (**TV menu → Connections → New devices/modifications**) compare the **connection diagram** with the actual installation and connect as illustrated (page 46).
Photo on the USB stick is not displayed correctly in the PhotoViewer or a "?“ appears.	The photo is not available in a displayable format.	Convert photo file into a standard JPG format on the PC.
A programmed **recording** was not made.	Recording of **analogue** stations with **VPS** data: The programme to be recorded was not (no longer) in the programmes offered by the station via VPS. Recording of **DVB** stations with **automatic time control**: The provider deleted the programme from the EPG data, for example due to a programme change.	The stations are exclusively responsible for the transmission of **VPS** data (for analogue stations) or for the use of the **automatic time control** (for DVB and MHEG-5 stations). The availability of the appropriate data cannot be guaranteed.

Technical data

General data

Type	Art 32 SL	Art 37 SL	Art 42 SL	Art 47 SL
Article number	68401xxx	68423xxx	68402xxx	68403xxx
Dimensions for device without stand (W x H x D) in cm Dimensions for device with stand (W x H x D) in cm	79.6 x 56.3 x 9.5 79.6 x 60.0 x 30.1	93.3 x 63.3 x 9.0 93.3 x 67.2 x 30.1	104.6 x 70.3 x 9.0 104.6 x 74.3 x 30.1	116.5 x 75.8 x 9.5 116.5 x 79.4 x 30.1
Weight for device without stand (approx.) in kg Weight for device with stand (approx.) in kg	15.2 18.0	19.5 22.3	25.5 27.5	29.0 31.0
Display	Full HD 100Hz Slim LCD technology	Full HD 100Hz Slim LCD technology	Full HD 100Hz Slim LCD technology	Full HD 100Hz Slim LCD technology
Picture diagonal in cm/picture format	81 / 16:9	94 / 16:9	106 / 16:9	119 / 16:9
Resolution in pixels	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Dynamic contrast ratio	10,000:1	10,000:1	10,000:1	10,000:1
Static contrast ratio	1,200:1	1,300:1	1,300:1	1,300:1
Viewing angle horizontal and vertical	178°	178°	178°	178°
Power consumption (EN 62087:2009) Power consumption "On" (W) without / with DR+ Power consumption in standby mode (W) Power consumption when the set is turned off (W)	 120 / 125 1.0 0	 140 / 145 0.9 0	 175 / 180 0.9 0	 190 / 195 0.9 0
Ambient temperature (Celsius)	5° – 35°			
Relative humidity (non-condensing)	20 – 80%			
Air pressure	800 – 1114 hPa (0 – 2000 m above sea level)			

Electrical data

Chassis designation: L 2715
Power supply: 220 V – 240 V/50–60 Hz
Tuner: VHF/UHF/cable/hyperband
Range: 45 MHz to 860 MHz
Station storage locations incl. AV and radio: 4000
TV standards: B/G, I, L, D/K, M, N
Colour standard: SECAM, PAL, NTSC, NTSC-V, PAL-V (60 Hz)
Sound standard Mono/stereo/2-sound/Nicam B/G, I, L
Nominal audio output (sine / music): 2 x 20 W / 2 x 40 W
Lower limit frequency of the speakers 90 Hz
Teletext: TOP/FLOF Level 2.5
Page memory 2000
Digital teletext (only in UK / IRL with active MHEG-5 software) MHEG-5

Connections (max. equipment)

Mains socket: Supply voltage
EURO-AV 1 Video IN: Y/C (S-VHS/Hi 8)
CVBS (VHS/8 mm)
Video OUT: CVBS (VHS/8 mm)
Y/C (S-VHS/Hi 8)
Audio IN: L/R
Audio OUT: L/R
EURO-AV 2 Video IN: Y/C (S-VHS/Hi 8)
CVBS (VHS/8 mm)
RGB
Video OUT: CVBS (VHS/8 mm)
Y/C, (only with SVHS Link Plus)
Audio IN: L/R
Audio OUT: L/R

Jack 3.5 mm: Headphones 32-2000 ohm
Mini-DIN (AVS) Video IN: Y/C (S-VHS/Hi 8)
CVBS (VHS/8 mm)
Cinch (yellow) Video IN: CVBS (VHS/8 mm)
Cinch (white/red) Audio IN: L (white) / R (red)
2 x IEC socket 75 Ohm/5 V/80 mA: Antenna/cable/DVB-T/C [1]
2 x F socket 75 Ohm 13/18 V/350 mA: ANT-SAT DVB-S/S2 [1]
Cinch Audio IN max. 2Vrms: Centre
2 x Cinch AUDIO IN1: L (white) / R (red)
Jack 3.5 mm AUDIO IN2: L/R
2 x Cinch AUDIO OUT (level configuration-dependent): L (white) / R (red)
Cinch COMPONENT IN: Cb/Pb signal
Cinch COMPONENT IN: Cr/Pr signal
Cinch COMPONENT IN: Y signal
Cinch Audio Digital IN (SPDIF): Digital audio
Cinch Audio Digital OUT (SPDIF): Digital audio
SUB-D AUDIO LINK: Multi-sound [1]
3 x HDMI Digital Video/Audio IN
Type A 19pole Standard 1.3: Digital video and audio
SUB-D PC IN: PC/STB video signal
SUB-D RS-232C: Serial interface [1]
Mini-DIN SERVICE: Service/L-Link
Mini-DIN CONTROL: Rotating stand control (positioning accuracy 1.5°) [1]
2 x USB USB 2.0: MP3/WMA/Standard JPEG files [1]
CI-Slot Common Interface: Slot for CA module
Jack 3.5 mm: IR-Link Output for infrared transmitter [1]

[1] Equipment variants and upgrade possibilities see page 73.

Setup possibilities

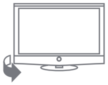


Table Stand



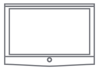
Floor Stand 4 [1]
Floor Stand 4 MU [1,2]



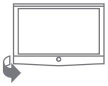
Floor Stand 5 MU SP [1,2]



Floor Stand A 32
Floor Stand A 37/42/47



Wall Mount WM 57
Wall Mount WM 58
Wall Mount WM 59



Wall Mount Flex 52 L [1]
Wall Mount Flex 32 L [1]

Art 42 SL / Art 47 SL

- Table Stand (delivery status)
- Floor Stand 4 [1] / 4 MU SP [1,2]
- Floor Stand 5 MU SP [1,2]
- Floor Stand A 37/42/47
- Wall Mount WM 57
- Wall Mount Flex 52 L [1]

Art 37 SL

- Table Stand (delivery status)
- Floor Stand 4 [1] / 4 MU SP [1,2]
- Floor Stand 5 MU SP [1,2]
- Floor Stand A 37/42/47
- Wall Mount WM 58
- Wall Mount Flex 32 L [1]

Art 32 SL

- Table Stand (delivery status)
- Floor Stand 4 [1] / 4 MU SP [1,2]
- Floor Stand 5 MU SP [1,2]
- Floor Stand A 32
- Wall Mount WM 59
- Wall Mount Flex 32 L [1]

[1] Only in conjunction with an appropriate adapter that is sold separately.
[2] Only in connection with the RS232C / Motor Unit / IR-Link upgrade kit.

Accessories

The following accessories are obtainable from your Loewe dealer.

Loewe Individual Sound:

Your TV set can be perfectly supplemented by the Individual Sound speaker system in connection with the Audio AC3/dts upgrade kit. Numerous speaker combination possibilities with standing speakers, satellite speakers and a subwoofer can be implemented.

Loewe Individual Sound Projector:

With the Loewe Individual Sound Projector you can enjoy digital Surround Sound without expensive installation and connection of several speakers. The Sound Projector is easy to set and operate.

Loewe DVD Recorder:

The DVD recorders from Loewe feature forms and colours which match the Loewe TV sets, an adapted user operation and technology. Combined these devices form a system that offers many advantages.

Loewe Blu-ray Player:

With the Loewe Blu-ray Player BluTech Vision you are ideally equipped for the successor format to DVD. With the Loewe system integration you control BluTech Vision and your Loewe TV set simultaneously with the Assist remote control.

Loewe MovieVision DR+:

With the external USB hard disk Loewe MovieVision DR+ you can archive programmes which you have recorded on the integrated hard disk of the Digital Recorder very easily. You can also connect the external hard disk to TV sets without integrated Digital Recorder and play recorded films there.

Subject to availability.

Accessories

Upgrade kits

Upgrade kit Digital Single Satellite Tuner (Art.No. 89565.081):

You can receive digital satellite and HDTV stations with the upgrade kit. The tuner is integrated in the TV set and is operated with the remote control/menu control.

The retrofit possibilities for your set can be found in the table on page 74.

Upgrade kit Digital Twin Satellite Tuner (Art.No. 89565.080):

You can have two digital satellite tuners installed in sets with Digital Recorder. This enables reception of digital satellite and HDTV stations and extends the display of PIP and the recording possibilities of Digital Recorder for two digital satellite stations.

The retrofit possibilities for your set can be found in the table on page 74.

Upgrade kit Audio AC3 / dts (Art.No. 89781.080):

A fully fledged Dolby Digital decoder can be integrated in the TV set with the Audio AC3 upgrade kit. A surround system such as Loewe Individual Sound can then be connected.

The retrofit possibilities for your set can be found in the table on page 74.

Adapter and cables:

AUDIO LINK adapter	1.5 m	Loewe order no. 89954.001
AUDIO LINK	1.5 m	Loewe order no. 89952.001
AUDIO LINK	6 m	Loewe order no. 89952.002
AUDIO LINK	10 m	Loewe order no. 89952.003
Cubic plug cable	1.5 m	Loewe order no. 90418.930

Upgrade kit USB extension (Art.No. 70167.080):

To ensure the availability of the USB connection when mounting on the wall or to be able to insert a USB stick with a large housing, a USB extension can be fitted to the TV set.
This upgrade kit is available from your Technical Customer Service (see service addresses on page 82).

Upgrade kit RS232C / Motor Unit / IR-Link (Art.No. 70461.080):

The RS232C / Motor Unit / IR-Link upgrade kit allows you to stand the TV set on a floor stand solution with a motor-controlled rotating foot. The Loewe Individual Sound Projector or a home networking system can be connected to the TV set via the RS232C interface (see page 56). The infrared function enables the operation of auxiliary equipment of other manufacturers installed in a concealed place. You operate the auxiliary equipment with its respective remote control via the Loewe TV set.

The retrofit possibilities for your set can be found in the table on page 74.

Equipment variants

The equipment of the individual set variants and their upgrade possibilities is listed in the table below.

TV type	Art 32 SL	Art 32 SL / DR+	Art 37 SL	Art 37 SL / DR+	Art 42 SL	Art 42 SL / DR+	Art 47 SL	Art 47 SL / DR+
Digital Recorder	–	●	–	●	–	●	–	●
Single DVB-T/C	●	–	●	–	●	–	●	–
Dual DVB-T/C	–	●	–	●	–	●	–	●
USB port	1x	2x	1x	2x	1x	2x	1x	2x
Single DVB-S2 Art.No. 89565.081	○	○	○	○	○	○	○	○
Twin DVB-S2 Art.No. 89565.080	–	○	–	○	–	○	–	○
Audio AC3 / dts Art.No. 89781.080	–	–	○	○	○	○	○	○
RS232C / MU / IR-Link Art.No. 70461.080	○	○	○	○	○	○	○	○

● ex factory
○ available as an upgrade kit
– not available

Glossary

0-9

24p movie display: Films released on **Blu-Ray Disc** support presentation of 24p cinema films. The Blu-Ray player transfers the original film format to the television with 24 frames per second. The DMM (DigitalMovieMode) set in the factory calculates and inserts additional intermediate pictures, which suppress film jerking typical for the cinema, thereby providing for a smooth motion sequence.

A

Active antenna: An antenna with its own power supply or amplification which can improve the reception is areas with a poor coverage.

Automatic time control: Similar to **VPS** for analogue stations the automatic time control monitors the start and end times of programmes from DVB stations. If these times deviate from the data programmed in the timer data the running time of the recording is adapted automatically. The automatic time control is not supported by all DVB stations.

AV socket: Socket for audio and video signals.

AV sources: Audio/video source.

AVS: Audio/video sockets on the side of the TV set (cinch and mini-DIN).

B

Band: Name for a transmission range.

Blu-ray Disc: The follow-up format of **DVD**. The contents of about five DVDs fit onto one Blu-ray Disc (abbreviated BD). Therefore, the Blu-ray disc provides enough space for high-resolution images and multi-channel sound formats.

C

CA module: The **Conditional Access module** contains the coding system and compares the transmitted code with the one on the **Smart Card**. If they match, the appropriate stations or programmes are decoded.

CEC: Abbreviation for Consumer Electronics Control. CEC provides universal component control functions for entertainment electronics devices (e.g. System standby, One Touch Play). CEC is also known as **Digital Link HD** at Loewe.

Cinch cable: Cable for transmitting audio or video.

CI slot: See **Common Interface**.

Common Interface: The Common Interface (CI slot) is a standardised interface. By inserting suitable decoding modules (**CA modules**) and a **Smart Card** coded digital programmes can be used.

Common Interface Plus: CI Plus is an advanced development of the **Common Interface** standard. CI Plus slots are in principle downward compatible to the previous CI standard, i.e. CA modules and Smart Cards according to the past CI standard can continue to be used in CI Plus slots, as far as the programme provider permits this. Additionally, extended regulations apply however to CI Plus.

Component IN: Connection in which the video signal is transmitted via three separate cinch connections. It is made up of the brightness signal "Y" and the colour difference signals "Pb" and "Pr". **YPbPr** is the original analogue version of the digital **YCbCr** in which video data saved on the DVD as well as transmitted via satellite, cable or antenna in DVB are colour coded.

Conditional Access module: See **CA module**.

D

Decoder: Analogue, coded TV signals are passed through a decoder and made visible again.

Digital Link: System for controlling recorders (for video and DVD recorders from Loewe) via the Euro AV sockets of the Loewe TV set with concealed setup. Controlling the recorder for timer recordings.

Digital Link HD: System for controlling devices via the HDMI connection of the Loewe TV set in the case of concealed installation.

Digital Link Plus: System for controlling recorders according to protocol 50. For analogue stations the station and timer data are transmitted via the EURO-AV socket to the recorder. The timer recording is executed exclusively by the recorder. There is a different designation with different manufacturers.

Dolby Digital: Digital multi-channel audio. The digital standard for high quality home movie systems. The individual channels are broadcast separately in this standard. The three front channels right, left and centre, the two surround channels right and left and the external subwoofer channels are called a 5:1 signal. Another term for Dolby Digital is AC3.

Dolby Pro Logic: Analogue multi-channel audio. Converts a Dolby-coded stereo signal into a surround sound. This usually contains four channels (front left, centre, front right, surround channel). A special subwoofer channel is not generated in this method.

Dolby Pro Logic II: Analogue multi-channel audio. Dolby Pro Logic II is a further development of **Dolby Pro Logic**. This method generates a 6-channel spatial sound from a stereo or Pro-Logic signal (front left, centre, front right, surround left, surround right, subwoofer).

Dolby Surround: Analogue multi-channel audio system that brings four audio channels down to two audio tracks with the aid of a matrix coding.

Dolby Virtual Speaker: The Dolby Virtual Speaker technology simulates the surround playback of a real 5.1-channel playback with only two speakers.

DTS: Digital Theater Systems; Digital multi-channel audio.

DVB-C/-S/-T: Digital Video Broadcasting stands for digital television. Technical DVB is the standardised process for transmitting digital content (television, radio, multi-channel audio, room sound, **EPG**, Teletext, and other supplemental services) through digital technology. **C** stands for transmission via cable, **S** for distribution via satellite and **T** for terrestrial or antenna distribution.

DVD: Abbreviation of Digital Video Disk and later Digital Versatile Disk.

DVD preceiver: Combi-device of DVD player and radio without integrated amplifier.

Glossary

DVI: Digital Visual Interface, is an interface for transmitting digital video and graphic data (without audio).

Dynamic contrast ratio: Here the light intensity of the display is adapted in case of a high black portion in the picture. The so-called backlights are dimmed automatically and the contrast ratio increases temporarily, i.e. dynamically.

E

Electronic Programme Guide: See **EPG**.

EPG: Electronic Programme Guide is the electronic variant of a printed TV guide. Using the EPG you can watch the TV programme of the TV station, transfer the appropriate data. The list of programmes contains the title, beginning and end and duration of the programme. In addition brief descriptions of the content of the programmes is also displayed.

Euro AV socket: Interface for connecting video devices to a TV set. This socket is also referred to as Scart socket.

F

FLOF: Full Level One Facilities. Teletext system in which names and numbers of the jump destinations are transmitted in the bottom line on every page. This guides the reader to related topics for example. An information about which pages exist and which pages have sub-pages is not available in FLOF.

H

HDCP: High-bandwidth Digital Content Protection. Coding system provided for the **DVI** and **HDMI** interfaces for secure transmission of audio and video data.

HDMI: High Definition Multimedia Interface is a newly developed interface for full digital transmission of audio and video data.

HDTV: High Definition Television is an umbrella term that covers a number of high resolution television standards.

HD-Ready: A quality seal that is awarded to products that are capable of displaying high-definition television (**HDTV**).

High band and Low band: Transmission ranges for satellites.

I

ID3 tags: Additional information for MP3 and WMA audio files. Information about the singer, title, album and album cover can be saved here among other things. These data are edited on the PC by an ID3 tag editor.

J

JPEG/JPG: Joint Photographic Experts Group is a committee which has developed a standard method for the compression of digital photos. This method JPEG (**JPG** for short), named after the committee, is a commonly used graphic format for photos.

L

LAN: Abbreviation for Local Area Network. Mainly used as a designation for networks with wiring (Ethernet).

LCD: Liquid Crystal Display.

LCN: Logical Channel Numbers. In stations with LCN, the channel location number belonging to the station is also transmitted by the provider. The stations are sorted according to these channel location numbers.

L-Link: Intelligent system connection between Loewe devices for the automatic exchange of information. Makes the operation of TV and Loewe system components even more convenient.

LNB/LNC: The crucial electronic component of a satellite antenna is referred to as an LNB (Low Noise Block Converter). It is mounted in the focal point of a parabolic antenna. The designation **LNC** (Low Noise Converter) indicates that conversion to lower intermediate frequency takes place. The supplemental block in the LNB refers to the fact that a whole frequency range (a block) is converted in each case.

M

MHEG-5: Digital teletext standard of the Multimedia and Hypermedia Expert Group. At the moment only available in United Kingdom and Ireland.

Modulator: Transmitter in the video or DVD recorder so that the devices can receive signals via the tuner of the TV device.

Mono: Single-channel audio.

MPEG: Digital compression process for video.

MP3: Data format for compressed audio files.

N

Network ID: NID refers to the so-called programme ID number, also known as network ID – a number between 0 and 8191. This specification is necessary in specific cable networks of some countries. Then only DVB signals of this station network are searched for.

NICAM: Audio standard. Is used in Denmark, England, France, Sweden, and Spain.

NTSC: American colour standard.

P

Page Catching: For teletext, refers to going to and calling a page number.

PAL: European standard.

PCM: Pulse Code Modulation for digital sound.

Picture in Picture: See **PIP**.

PIP: Picture in Picture; a function which displays two pictures on the screen.

Pixel: Denotes both the smallest unit of a digital graphic grid and its display on a screen with grid control.

Glossary

Pixel error: A pixel error is a defective pixel, usually on an LCD. Pixel errors may be caused by production errors. They are expressed for example by a constantly lit pixel or a constantly black pixel. Single defective pixels however are excluded from a guarantee.

Progressive JPEG: Progressive **JPEG**s are built up gradually. The quality of the picture increases progressively during the loading process.

ProScan/Progressive Scan: Progressive Scan (abbr. PS) or full picture method is a technique in the picture build-up of monitors, TV sets, beamers, and other display devices in which the output device is not sent line interlaced half pictures – unlike in the interlace technique – but real full pictures.

R

RGB: Colour signals red, green and blue.

S

Satellite tuner: Receiver for satellite programmes.

SDTV: Standard Definition TeleVision.

SECAM: French colour standard.

Set-Top-Box: Set-Top-Box (STB for short) refers to a device in entertainment electronics which is connected to another device, usually a TV set, and offers the user additional functional options.

Signal input groups: Depending on the applied signal, the signal sources are divided into different groups. All signal input groups with their corresponding signal types and the possible inputs are listed below.

TV analogue:
Signal type: FBAS, YC, RGB-SD (480i/576i), Component-SD (480i/576i)
Input: Tuner analogue, AV1, AV2, AVS, COMP. In

TV digital:
Signal type: DVB-SD, HDMI-SD (480i/576i)
Input: Tuner digital, HDMI1/DVI, HDMI2/DVI, HDMI3/DVI

HD analogue:
Signal type: RGB-HD (video mode: e.g.1920x1080, 1280x720), Component-HD (video modes: e.g. 1920x1080, 1280x720)
Input: COMP. IN, PC IN

HD digital:
Signal type: DVB-HD, HDMI-HD
Input: Tuner digital, HDMI1/DVI, HDMI2/DVI, HDMI3/DVI

PC:
Signal type: RGB (PC modes: e.g. 800x600, 1024x768, 1280x1024, 1360x768)
Input: PC IN

PhotoViewer:
Input: USB

Signal strength: Strength of the received antenna signal.

Signal quality: Quality of the incoming antenna signal.

Smart Card: The Smart Card is an electronic chip card issued by the respective programme provider or by the certification-free Pay-TV operators. It contains the code which is decoded by the **CA module**.

Static contrast ratio: Describes the difference between the brightest and darkest picture display.

Stereo: Dual-channel audio.

Switch voltage: Video devices specify this voltage to switch the TV device to playback.

Symbol rate: Describes the transmission speed for data transmission.

T

Terrestrial: In data transmission a wireless transmission that does not use satellites as intermediate station is referred to as terrestrial.

TFT: Thin Film Transistor. One widely distributed application is control of liquid crystal flat screens, for which a signal transistor is used for each pixel. This design of display is also referred to as active matrix, however it is frequently also referred to as TFT display.

TOP: Table of Pages. Teletext system in which the individual pages are divided into topics. The blocks stand for a higher hierarchy level (e.g. News, Sport, Programmes) and the groups for the level below (e.g. Home/Abroad, Football/Tennis). Abbreviations can be assigned to the pages which are displayed in colour on the bottom line and can be selected with the four coloured buttons on the remote control. Information is also transmitted about which pages exist and which of them have sub-pages.

Tuner: Another term for receiver.

U

USB: Universal Serial Bus. Serial bus system for connecting external devices (USB card reader, USB stick).

V

VGA: PC interface for connecting a monitor.

VPS: The Video Programming System (VPS) is a signal which some (but not all) analogue TV stations transmit in the blanking gap. The signal is used by video and DVD recorders when recording programmes to react to delays in start time, programme changes and excesses of the planned programme time.

W

WLAN: Abbreviation for Wireless Local Area Network. Also referred to in brief as wireless network.

WMA: Abbreviation for Windows Media Audio, Microsoft’s own audio data format. The contents are compressed as in MP3 files.

Glossary

Y

Ycc/Ypp: Colour standards for **Set-Top-Boxes**.

YCbCr: Digital colour model, see **COMPONENT IN**.

YPbPr: Analogue colour model, see **COMPONENT IN**.

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Other

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This set contains a software which is based partly on the work of the Independent JPEG Group.

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